



JOHANNES, THE BASUTO KEEPER OF THE WORLD-FAMOUS SNAKE PARK AT
PORT ELIZABETH, SOUTH AFRICA

Frontispiece.

SNAKES

by

F. W. FITZSIMONS

*Director of the Port Elizabeth Museum
and Snake Park*

WITH 44 ILLUSTRATIONS

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PUBLISHERS' NOTE

F. W. FITZSIMONS, F.Z.M., F.R.M.S., etc., Director Port Elizabeth Museum and Union Snake Park, born in Garvaghay, Ireland. Educated in Natal and Ireland. From early boyhood he manifested a passion for the natural sciences, his early studies being directed by private tutors. Studied medicine and surgery for three years. Made a special study of the Natural History of South Africa. From the age of twenty years has been a constant contributor to newspapers and magazines in South Africa and abroad on a variety of branches of science. For nine years was Curator of the Pietermaritzburg Museum ; on completion of the Natal Government Museum in 1893 he was transferred to Government service, and classified, labelled, arranged, and catalogued the multifarious departments of that fine museum. Resigning in June 1906, became Director of the Port Elizabeth Museum. The collection, although enormous, was in a condition of chaos. In eighteen months he rearranged, re-identified, classified, labelled, and catalogued the whole collection. By popular lantern lectures, Press writings, distribution of free Museum Guide booklets, and in other ways public interest has been sustained to so great a degree that for the past twenty years visitors to the Port Elizabeth Museum have averaged 10,000 per month.

A feature of his museum work has been the supplying of free collections of specimens to public schools. An average of twenty schools per annum, for the past fifteen years, have been provided with named collections of specimens to form nuclei of school museums throughout the Union of South Africa. In 1917 was called upon to transfer the Port Elizabeth Museum collections to new premises. This is the fourth time he has undertaken the entire reorganization of large museum collections. He has specialized on the snakes of South Africa, their venom, and the treatment of snake-bite ; and his experiences

and experiments are to a great extent embodied in a volume of 600 pages and 300 illustrations which is now in its third edition. He maintains a "Snake Park" in the grounds of the Museum, where an average of 1,000 live snakes are kept for research purposes and for exhibition to the public. He is also author of the following illustrated works : *The Monkeyfolk of South Africa*, *The House Fly*, *The Natural History of South Africa* (in four volumes), *Birds : Their Value to Man* (two volumes), *Ants and their Ways*, *Snakes and the Treatment of Snake Bite* (in English and Afrikaans), *Pythons and their Ways*. This versatile author has several more books in course of preparation. Recently he undertook a great deal of research work in Anthropology, and his discoveries in the Zitzikamma and elsewhere of coastal Bushmen are noteworthy. He was responsible for bringing the now famous Boskop skull before the scientific world by his forceful statements of its antiquity and affinity to fossil types of men. One of the results of his research work on snake venoms was the production of a venene for the treatment of epilepsy and other diseases of nervous origin. A Paper tabulating the results up to July 1929 was given, by request, to the British Association and South African Association at their joint meeting in Cape Town in August 1929, and another to the South African Association of Science at Grahamstown in 1931.

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SNAKES

CHAPTER I

The Snake Park at Port Elizabeth—Habits and ways of snakes—
Snake venoms and antidotes—Different classes of snakes—
Front-fanged, back-fanged, and fangless snakes.

FOR many years I kept collections of live snakes at my home at "Gorahwood" in Natal for study purposes. On my appointment as Director to the Port Elizabeth Museum in 1906 a row of glass-fronted cages was erected in the building, which then housed the Museum collections. Here research work of a practical nature was pursued, some of the results of which were published in a volume entitled *The Snakes of South Africa*.

Our present premises have ample grounds, so that it became possible to materialize a long-cherished desire to keep live snakes captive out in the open. It was necessary to give the subject very careful thought in order that the park could be utilized for keeping all species of live snakes, even the bulky python.

A suitable design was thought out and drawn to scale. This was approved by the Museum Board, and the long-dreamed-of Snake Park became an accomplished fact. On the inner side of the wall is a moat three feet in breadth ; this keeps the snakes

out of reach of the public, and also serves as a swimming bath for the reptiles, and an aquarium in which goldfish and a variety of other species of fish, as well as frogs, crabs, water lizards, tortoises, etc., live and breed. In the centre of the park there is an oblong pond covered with blue lotus and other water plants. The enclosed land is partially grown over with soft but hardy lawn grass and substantial huts are set on suitable foundations. They provide shelter for the snakes at night and when the weather is cold and rainy during the daytime. South African aloes and shrubs grow round the centre pond, and these add to the natural appearance of the park, and also serve for the snakes to climb about and roost on, which they are very fond of doing.

The park was subsequently extensively improved and added to. Square pergolas surround it, and four artistic buildings stand at the corners. One of these is the entrance pavilion, two are lined with glass cases in which are exhibited the study collection of lizards and snakes, with dissections, photographs, drawings, etc. The fourth is the hot-house of Pythons, and in which other snakes hibernate during the coldest winter months. Creepers are growing over the pergolas; the grounds are nicely planted with flowers and shrubs. A great marine hall, fresh-water aquarium, and a large open-air aviary in which a thousand South African birds are kept, stand adjacent.

Adjoining the Snake Park there is a café for the convenience of visitors.

The Snake Park is an annexe to the Port Elizabeth Museum.

The snakes are all South African, of various species, and the number fluctuates according to the season, from 500 to 1,000 individuals, two-thirds of which are of the venomous species (*Opisthoglypha* and *Proteroglypha*).

Snakes and water.

Their fondness for water during the summer-time is surprising. Puff Adders are especially fond of bathing. They swim sluggishly, with an undulating movement of the body, which is very buoyant. When tired of swimming, they often lie and rest on the water. The head and two-thirds of the body float, and a portion of the tail-end hangs more or less perpendicularly in the water. Often the body is partly supported by water-plants, and in this position the reptile often lies all day. However, they can, at will, float freely without any artificial aid. The Puff Adders and Night Adders are to be seen at all hours of the day during the warmer seasons of the year either on the water or on the grassy edge, with their bodies more or less submerged. When the sun sinks upon the horizon the different species of snakes in the park retire to their respective huts, with the exception of the Adders. While some of these latter go to rest, others remain outside and continue to be active, both on land and in the water, often until late into the night. On calm, warm nights numbers of them are abroad throughout the hours of darkness. They are specially active on balmy moonlight nights.

The Boomslangs are graceful swimmers. With head slightly raised, they glide over the water at great

speed, and as smoothly as a motor-boat. They, too, are rather fond of bathing.

The Cape Cobras (*Naia flava*) and Ringhals Cobras are frequently in the water. The former swim with considerable speed, but the latter are sluggish by comparison. These snakes delight to bask on the water in the sun, with their hoods expanded. When lying thus they often partly support their bodies on water-plants. Even the Mole Snakes bathe and disport themselves in the water. They are rather shy and favour the centre pond, and cling on and round the aquatic vegetation, or use it for support to lie on. Clinging round the stem of a papyrus, or gripping a bunch of rushes, the snakes lie with head above water and body submerged for an entire day. The Green Water Snake (*Chlorophis*) is entirely at home in the water. It glides with great rapidity, and at times dives beneath the surface and captures small fish. The Olive Water Snake (*Ablabophis rufulus*) frequents the water to a much greater extent than its green cousin. It passes most of its time more or less submerged, and when alarmed it dives, and, gripping the root or stem of a plant, remains at the bottom of the water for five to fifteen minutes. Then rising, the nose is thrust gently above water, and, if the cause of alarm is still present, it quietly withdraws its head after inflating its lung.

The bulky Python.

Formerly the Pythons (*Python sebae*) were kept with other snakes, but this was subsequently found to be unsatisfactory. A special enclosure has now been

erected in which they dwell in harmony with Water Tortoises and a number of Monitor Lizards (*Varanus*).

During the summer season as many as thirty Pythons are on exhibition, but the mortality is high in winter-time.

All the small species of snakes are confined in an enclosure by themselves to enable the visitor to study them to the best possible advantage, and also because the Cobras in the larger enclosure preyed too freely on them.

Unique opportunities for study.

Living in an environment more or less similar to, and even more congenial than, their wild haunts, the snakes can be observed to perfection, for in such surroundings they live out their own natural lives.

Observations made on snakes in cages are not reliable, for the reason that they often behave in ways unnatural to them in Nature's environment.

The student has a unique opportunity for studying these reptiles in the Port Elizabeth Snake Park, and still photographs and movie pictures of them may be obtained in positions and situations rarely seen in Nature, and, even if observed, a momentary glimpse is usually all that meets the eye.

The snakes are studied systematically by the senior scholars of the various schools as an essential part of their Nature study lessons. Artists and art students find that a careful study of the wonderful blendings of colour on snake skins is extremely helpful

to them. Many species of snakes are of inestimable economic value to man ; but people are slow to recognize this important fact or to turn it to practical account when realized.

Feeding habits of Snakes.

Snakes are decidedly eccentric in their feeding habits. Some of the snakes, even in the presence of their natural living prey, prefer to remain on hunger strike and die of starvation. Others feed actively. The Cobras are more cannibalistic in their feeding habits than any of the other species of snakes in the park. They feed chiefly on Schaapstekers (*Trimerorhinus*) and Grass Snakes (*Psammophis*), but they do not hesitate to attack and devour other species of snakes. The Mole Snake, and sometimes the Puff Adder, fall victims. The Puff Adder fights long and energetically before finally succumbing to the nerve-paralysing effects of the venom of its antagonist. The Cobra usually seizes its victim and, holding grimly on, continues to inject venom until its prey has become inoculated with sufficient to induce paralysis of the nerve centres. The Boomslangs (*Dispholidus typus*) also prey on the Schaapsteker and Grass Snakes. It is interesting to observe them moving alertly on the close-cut grass along the inner edge of the moat on the look-out for frogs (*Rana*). If the frogs remain perfectly still the snake invariably passes them by unobserved. This is noticeable with all other species of snakes in the park. Rats will sometimes sit quite still in the grass, or even on the bare ground, and the snakes will crawl past them, sometimes within a few inches.

Death swift and sure.

If the rodent makes the slightest movement, however, it is seen, and a swift stroke from the snake terminates its life. The venom of a snake paralyses and kills all warm-blooded prey such as rats and birds in a surprisingly short time. After being bitten a large rat staggers for a few moments and dies painlessly. This is due to the fact that the neurotoxin (nerve poison) in the venom produces an almost instantaneous fatal effect. In larger victims such as man, the neurotoxin principle in Puff Adder venom is not sufficient in quantity to induce rapid death. Consequently, the haemorrhagin, or blood-poisoning, properties of the venom have sufficient time to produce their characteristic symptoms, viz. haemorrhage into the tissues, discoloration, and swelling more or less profound.

When a Cobra seizes a rat it usually holds it in its jaws. The victim struggles for a moment or two and dies. The Puff Adder sometimes retains its victim, but as a general rule it is bitten and immediately released. In the case of the rat, the reason may be to avoid a bite by the sharp incisor teeth of the rodent. Non-venomous snakes kill their prey by constriction. The victim is seized by the snake and instantly constricted by two or more coils being thrown round its body. The prey is so powerfully squeezed that it dies of suffocation in a few minutes. When dead it is swallowed head first.

Pythons seldom eat voluntarily. They are kept alive by forcible feeding with raw meat once a month.

The smaller snakes, such as the Boomslangs, are artificially fed with egg-flip and meat. Surgical treatment of various kinds is frequently necessary to save the lives of snakes.

The chills of winter.

During the winter months the snakes in the park are more or less lethargic, and the mortality is high. The attendant puts them into their huts every evening and closes the doors. They are turned out again at 10 a.m. daily, and the doors of the huts are closed to prevent them crawling back. The snakes seldom frequent the water during the winter. Occasionally, when the air is warm, a few swim about or lie in the water. In the wild condition snakes retreat into holes, crevices, hollows in trees, etc., and hibernate during the winter months. At this time they do not take food.

Slaying our friends.

The non-venomous snakes are extremely valuable allies in our struggle against those eminently destructive rodents, the rats and mice, for the reason that their food consists chiefly of these pests. The snake is able to penetrate into the secret hiding places of rats and mice and there destroy them and their young. It is not only foolish and short-sighted to destroy the harmless species of snakes, but it is distinctly cruel and unjust to slay the creatures provided by Nature to keep in check those forms of life which would otherwise make the lot of mankind a hard and uninviting one.

There are many species of snakes which are

venomous only to a slight degree, and these are quite inoffensive. They, too, render valuable services in destroying rats and mice.

Farmers would do well to make a careful study of snakes so that they may be able to recognize friend from foe.

✓Snakes have evolved from lizards, or lizard-like creatures with legs. We have to-day in South Africa living types of lizards in the various transitional stages. Some have long snake-like bodies with four small legs, which are also rudimentary. Others have only one pair of tiny legs, which are now obsolete and are fast disappearing. Others again, for instance, the Burrowing Lizard (*Acontias meleagris*), are devoid of legs. These lizards are invariably taken for snakes.

✓ The lowest family of snakes is the Blind Burrowers (*Typhlopidae* and *Glauconidae*). Naturalists in the past hesitated to classify these creatures as snakes. They were commonly thought to be lizards.

✓ The South African Python (*Python sebae*) is a living example of the evolution of snakes from reptiles possessing legs. The Python has two horny spurs near the vent. These are vestiges of legs, for, on dissection, it is found that immediately beneath, and buried in the flesh, are the leg bones, proving conclusively that the ancestors of Pythons had legs.

Constricting Snakes.

The Python is one of the giant snakes. Its remote ancestors were doubtless far more bulky. The Python, and its close relation the Boa, are non-venomous. They kill their prey by constriction. A ten-foot South

African Python constricted the body of a lady, causing grave internal injuries, although it only gripped her for a few moments.

Pythons, as a general rule, are inoffensive snakes, and unless attempts are made to capture them they rarely show any disposition to attack man. The Python is a very useful snake, for it devours considerable numbers of rats, and it is the chief enemy of the large sugarcane-eating rodent known as the Cane Rat (*Thryonomys swinderenianus*).

Aglypha.

There are three great divisions or classes of snakes, viz. the Aglypha, or solid-toothed snakes. They are all non-venomous. Most, but not all of them, kill their prey by constriction. The second division is the Opisthoglypha, or Back-fanged snakes, all of which are venomous to a greater or lesser degree. These snakes have the poison apparatus in a transitional condition of development. Some of this group have recently been shown by us to be as highly venomous as the dreaded Cobra. The third division is the Proteroglypha. The snakes of this division, without exception, possess the poison apparatus complete, and the fangs are set in the front of the upper jaw.

The Mole Snake (*Pseudaspis cana*) and the House Snake (*Boodon lineatus*) are types of the non-venomous (Aglypha) kinds.

Opisthoglypha.

The Boomslang (*Dispholidus typus*) and the Herald, or Red-lipped Snake (*Leptodira hotamboeia*) are examples

of the Opisthoglypha, or Back-fanged, group of snakes, and the Puff Adder and Cobra are types of the Proteroglypha, or Front-fanged division.

There is no sure way of discovering whether any unknown snake is of the harmless or venomous class except by a careful examination of its teeth. Of course, anyone can become familiar in time with the appearance of the different kinds or species of snakes, and may identify most of them at sight. The agriculturist has a valuable asset in the many harmless or non-venomous species of snakes. Unfortunately, all snakes are alike to him and are foolishly destroyed. The House Snake (*Boodon lineatus*) is far more useful in the house than a cat, for it can pursue the rats and mice to their innermost haunts ; and even dispose of the young rodents in their nests.

There are a considerable number of species belonging to the Back-fanged, or Opisthoglypha, division of snakes in South Africa. Until lately this group was regarded as venomous only to a slight degree, and none of the species was considered dangerous to human life.

However, some years ago an assistant at the Port Elizabeth Museum was bitten by a Boomslang, which is one of the despised Back-fanged division. The man hovered for many days between life and death, but eventually recovered. I subsequently conducted a series of experiments with this species of snake, and found that, weight for weight, the venom of the Boomslang was equal in its toxic or poisonous power to that of the Cobra. Other snakes of this Back-fanged group were also tested and found to be exceedingly venomous.

This is more far-reaching than might be supposed on first thoughts, for the whole tropical and semi-tropical world abounds in snakes belonging to this Back-fanged group, which are regarded as venomous only to a slight degree. If several of the South African species have been shown to be highly venomous, it is reasonable to infer that a considerable number of species in other countries would be equally venomous.

Proteroglypha.

There are two distinct groups of Front-fanged, or Proteroglypha, snakes, viz. the Adders (*Viperidae*) and the Cobras (*Elapinae*). These snakes all possess a highly virulent poison, secreted by glands which are connected by ducts with the hollow or grooved fangs. The primary action of Adder or Viper venom is on the blood, and the endothelial cells which line the capillary blood-vessels, causing haemorrhage into the tissues, more or less extensive, according to the quantity of venom injected. Although possessing nerve-poisoning properties, the chief effect of Adder venom is haemolytic.

Venoms and their effects.

It takes a larger quantity of Adder venom to cause death than is the case with the venom of the Cobra or Mamba. The venom of these snakes is a neuro-toxin, or nerve poison. It poisons the nerve centres controlling the lungs, causing the latter to collapse. At the same time it paralyzes the inhibitory nerve which regulates the pumping of the heart, resulting in a wild and rapid beating of that organ. A singular

fact in regard to Cobra poisoning is that, for some time after the lungs have collapsed and the victim has ceased to breathe, the heart is still beating.

Alleged antidotes.

There are some forty or more alleged antidotes for snake venom poisoning in South Africa. Some of these are proprietary and others are native remedies. I was engaged off and on for many years in experimenting with these supposed antidotes, which the population of this country, both black and white, believed to be sure cures. One of these alleged cures is a substance known as Isibiba, which is considered to be an infallible antidote for snake-bite by at least two-thirds of the native population of South Africa, and by thousands of farmers, who sew it in their braces or belts in order to have it readily available in an emergency. This substance has a remarkable reputation, and it is looked upon as an insult if it is suggested to those who believe in its virtues that it is quite worthless. I procured fresh samples of Isibiba from various parts of South Africa, and with it conducted a series of experiments under test conditions, but found it to be of absolutely no antidotal value in the treatment of poisoning by snake venom.

A book on South African Snakes.

It is not the purpose of this book to go into details in regard to all the experiments and findings with alleged snake venom remedies and the nature and effects of snake venom ; but those who are sufficiently interested in the subject may read the result of twenty

years' experiences and experiments in the revised and enlarged work entitled *The Snakes of South Africa, their Venom and the Treatment of Snake Bites*. This book contains upwards of 200 illustrations, the great majority of which are original. The volume may be had of any bookseller, or from the publisher, Maskew Miller, Limited, Adderley Street, Cape Town. A handbook entitled *Snakes and the Treatment of Snake Bite*, in English and Afrikaans, has since been published.

CHAPTER II

Cannibal snakes—Hunger-striking—How the Snake Park obtains its supplies of snakes—Snake hospital—Surgical operations on snakes—Therapeutic value of prepared snake venoms—How epilepsy is cured with them.

THE difficulties arising in connection with keeping large numbers of snakes alive and massed in open-air enclosures seemed endless and unsolvable. Many species are cannibalistic in their habits, and, as a consequence, all the lesser snakes fell prey to them. Others quarrelled and viciously bit one another, with fatal effect. But the greatest worry of all was the high mortality, which was partly due to the refusal of these exasperating reptiles to eat, despite the presence of their natural prey. The chief reason for this appears to be psychological. Snakes, when handled and in the sight of human beings, invariably go on hunger strike. It may be they are actuated by instinctive fear of eating and thus burdening their bodies with food, which handicaps them in escaping from their human enemies, or, perchance, from putting up an effective resistance.

In the wild condition, when a snake is attacked, and should it have a bulky meal in its stomach, in most instances it will disgorge the prey.

The annual expenditure in replacing the wastage of snakes in the park runs us into upwards of £400 a year.

From the mountain fastnesses, gorges, wooded hills, forests, bush-veld, Karroo, Kalahari, and Rhodesia, snakes arrive during the warm season of the year to replenish our stocks.

Hundreds of specially designed boxes are kept on hand to supply farmers and others who volunteer to supply us with live, uninjured snakes for cash.

Snake-catching, apparently, is not an occupation or a pastime which many would care to indulge in, but, all the same, we have on our books upwards of 100 regular catchers of snakes. A farmer, for instance, writes and asks us to send him our illustrated pamphlet of prices and details in regard to how to proceed exactly with the job of safely capturing snakes. Should he signify his willingness to supply us regularly with snakes, we forward to him a couple of specially designed boxes for the despatch of the reptiles by rail. On arrival, the boxes are carried into the Snake Hospital, of which more anon. Here Johannes and the lay assistant open each box in turn. The captive is taken out, examined, and measured. These details, with the name of the snake and the address of the sender, are recorded in a log book, with the price to be paid as well, for the information of the secretary, who at once sends a postal order or cheque in payment.

Often as many as thirty boxes of snakes, each from a different person, will be received and attended to in a day. We usually get far more snakes than we want, but, I ask you, what can we do? Are we to return them to the sender with a polite note to the effect that we are sorry the market is glutted, and

advising him to turn them loose on his farm? Else, are we secretly to throw them over the wall into our neighbour's garden; or put them in a sack and dump them on the golf links, or in the bush at the seaside pleasure resort of Port Elizabeth?

No, we take every snake that comes along, but the disputes in regard to payment are endless. We quote prices: for instance, 2/6 a foot for Pythons, and anything from 1/- to 10/- and even 20/- for other snakes. But a man sends along a Puff Adder born, perchance, yesterday, and grouses like the devil because he doesn't get the price of an adult specimen for it.

Lizards and worms often arrive, which the senders mistake for snakes. Others forward sundry tiny species of snakes, or specimens badly injured; and when pay-day arrives they write and express their disgust in either ungrammatical Afrikaans or English.

"Jah," wrote one fellow, "you advertise that you give 5/- to 7/6 each for Puff Adders and all I got for one was a blinking half-crown."

So, to save our face, we had to go into the usual explanation that the price varied with the size and condition of the snake. I don't bother any more about all those controversies. The lay assistant and secretary have got to square things out as best they can for themselves. Numbers of our suppliers make five pounds a month at snake-catching.

Farmers do not seem to possess two-foot rules or tape measures, apparently, judging lengths no doubt by the eye or stride; especially so when they send pythons to us.

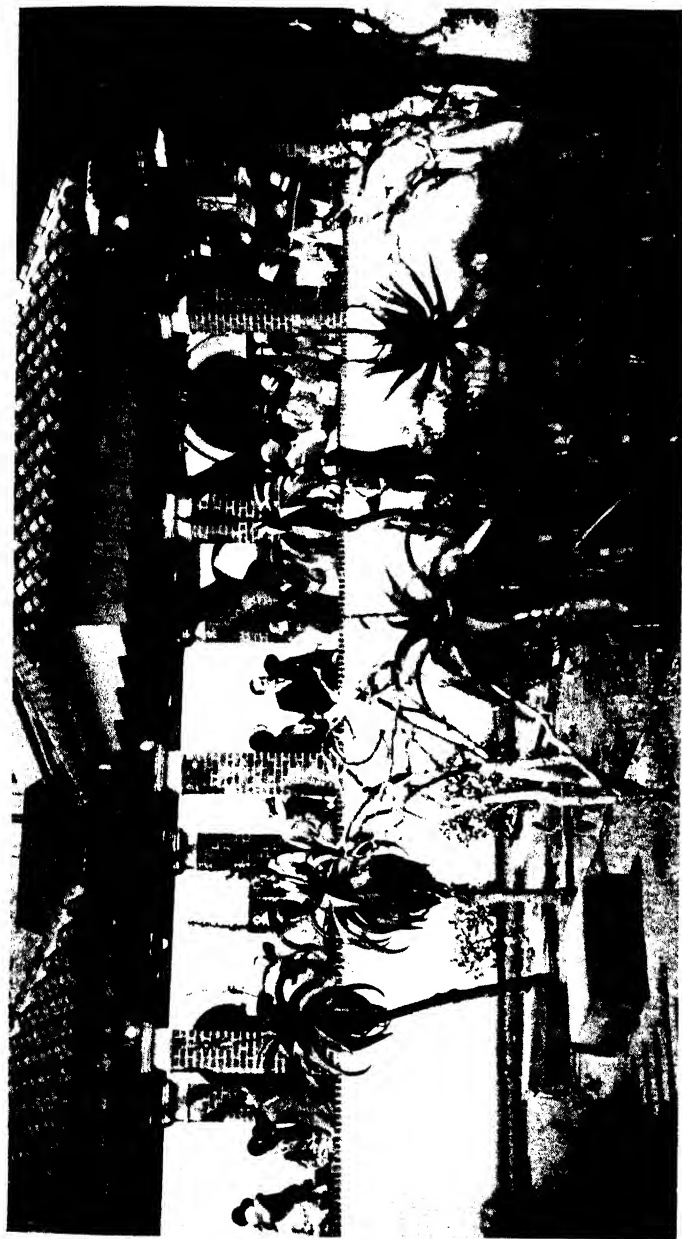
A letter arrives, or a telegram: "I have sent off a

twenty-foot python" ; or it may be fifteen feet for that matter. All the same, when my assistant and Johannes measure it with a tape, the length always falls short by anything from a foot to two yards. Why mention so trivial a happening, you ask ? It isn't trivial at all to us, because when the sender, expecting 2/6 a foot for a fifteen-foot python, gets a postal order value for ten foot of Python, he raises dust, and we invariably feel mean and small afterwards, because we know full well he believes we have cheated him out of five feet of snake.

These are only a few of the snags we butt into in our daily labours to keep the Snake Park up to as high a degree of excellence as possible.

One of our activities is to take a photograph of every unusual happening among the snakes. We have negatives of thousands of snakes, many of them doing the most unheard-of things. Such negatives are valuable records ; and so, too, are the piles of diaries recording the times of the year the various species of snake produce their young, or lay eggs ; the number and coloration of the young snakes at birth ; the degree of venom activity with which they come into the world ; the colour variations of adult snakes from the same locality and other localities ; the distribution of each species, where abundant and where scarce ; and a thousand and one other things which are valuable for reference.

The Snake Park is looked upon by the average person as merely a show place where people flock, and, after paying a humble shilling, they can feast their eyes on hundreds of snakes and hear Johannes explaining all he knows about them.



A CORNER OF THE SNAKE PARK AT PORT ELIZABETH, SHOWING THE USUAL DAILY CROWD OF SIGHTSEERS



JUST A FEW OF THE INHABITANTS OF THE SNAKE PARK AT PORT ELIZABETH. "THE GARDEN OF DEATH" IS THE TERM WHICH MANY VISITORS APPLY TO IT



SOUTH AFRICAN EGG-EATER SNAKE (*Dasypeltis scabra*) IN THE ACT OF SWALLOWING THE EGG OF A DOMESTIC DUCK. WHEN THE EGG IS SAFELY LODGED IN THE SNAKE'S THROAT, THE SHELL IS SAWN THROUGH WITH A SET OF TOOTH-LIKE, ENAMEL-TIPPED PROCESSES WHICH JUT FROM THE LOWER PART OF THE BACKBONE AND PENETRATE THE GULLET



- (1) THE MOST DANGEROUS JOB IN THE WORLD. JOHANNES IN THE SNAKE PARK PICKING UP A LIVE BLACK MAMBA, WHICH IS THE FIERCEST AND MOST DEADLY OF ALL SNAKES
- (2) BLACK MAMBA SURPRISED IN A GARDEN AND PHOTOGRAPHED WHILE ABOUT TO SLITHER UP A TREE

"Dis one, Baas, hims a Black Mamba, vera poisonous."

Yanking out a Mole Snake from under a shrub, he volunteers the information that "Hims a Mole Snake—not poisonous, Baas." Then, after a pause, "Jah, Baas, hims good snake ; eats rats."

Then, if there are a good many visitors, he lugs forth a protesting Puff Adder, deftly places the crook of his stick on its head, kneels and seizes its throat with his forefinger and thumb. Rising, he calmly looks round for a twig, or asks some onlooker for a match, with which he carefully raises the large curved fangs ; and while the people gaze fascinated, venom is seen to ooze out and fall drop by drop. The fangs are then pressed down again, the dental membrane adjusted, and the indignant reptile given its liberty.

This public attraction part of the business doesn't interest me overmuch, but, unfortunately, it is very necessary because we do not get any financial help from either the local authorities or Government ; and so, in order to carry on research on snakes and their venom, and other interesting work, such as the records already referred to, a small admittance fee is levied.

But let us come back to the fate of the snakes on arrival. After the measuring and recording of details are completed, the snake is dropped into a large enclosure some seventy by forty feet, which is known as the Snake Hospital.

This structure has sides so high that nobody can see over the top. Among growing grass, shrubs, and pools of water the reptiles roam, feeling they are once again at liberty in their native wilds. Here they feed

freely, mostly on frogs ; dead rats and mice are given to them as well, but these rodents cannot be secured in sufficient numbers. There is one serious drawback, and that is, the Cobras are apt to levy too large a toll on the lesser snakes. Of course, if money was no object we would have several duplicate enclosures, and a farm near by where all the spare and sick snakes could be kept ; and also where much research work could be done.

Each snake, on arrival, is carefully examined, and if there are any cuts or gashes on its body they are disinfected and sewn up. Often a Python will arrive badly wounded, which necessitates an elaborate operation. These giant snakes are frequently afflicted with a reptilian disease called canker of the mouth, or, in other words, nasty scabby sores which spread and eventually kill the snake. This is a difficult disease to eradicate, and requires persistent and prolonged treatment. The teeth of these snakes are also found to be smashed or otherwise damaged. This usually happens when the Python makes its last stand against its captors. If the damaged teeth are not removed and the mouth sterilized, canker will soon develop.

Puff Adders, too, suffer a lot from disease of the mouth engendered by pus-forming bacteria, and operations on the mouths of these fierce and surly snakes are not pleasant. One day we were about to operate on a Puff Adder's mouth, and Johannes was holding the patient. He knows as well as we do that when holding a snake by the throat its head should be turned aside, because in its rage it is apt to gnash its jaws and discharge a double jet of venom.

Johannes was holding the Puff Adder in a most indifferent manner, and when we turned to examine the reptile's mouth we received a dose of venom full on the face, but none entered the eyes because we were wearing spectacles. Snake venom does not do any harm on the unbroken skin.

All the venomous species of snakes are allowed to retain their poison fangs with the exceptions of the Ringhals Cobra and the Black-necked Cobra. These two species of snakes have the remarkable power of being able, at will, to eject their venom at a distance of some six to eight feet. Consequently we perform an operation to make it safe for visitors to stare at them over the Snake Park wall, and so that the attendant will not have to wear goggles all the time. This little operation deprives the reptiles of their spitting power without causing them injury.

Some species of snakes refuse all food, even when it is of the kind they like best. So, in these instances, we are obliged to adopt the same methods as prevailed in Britain with the pre-war suffragettes, viz. forcible feeding.

Puff Adders object to this compulsory feeding more than any other species of snake. We can assure you it is "no light job" to pick up a surly Puff Adder with your bare hand—we say advisedly, bare hand—because, when doing delicate work, one's hands must not be cumbered with thick gloves.

After getting a grip of the snake's throat with the forefinger and thumb, the jaws are forced open with the fingers of the other hand. Then another operator comes along with a glass syringe full of egg-flip.

The nozzle and half the syringe is slid down the reptile's gullet and the contents discharged. The snake is then put away very gently, else, if handled roughly, it will disgorge the food. Another plan is to push mice, bits of rat, and lumps of raw meat into the gullet and then work it down to the snake's stomach by massage with the fingers.

Pythons are sometimes difficult to forcibly feed because of their great bulk, three men often being required, one to look after the tail, another to force the food into the throat, and a third to work it down. Often the reptile subsequently throws up all the meat ; but this dodge is now discounted by applying a ligature between the stomach and mouth for a few hours until the digestive processes are under weigh. Apart from the Snake Hospital being employed for the performance of operations, forcible feeding, and nursing sick snakes, it serves the purpose of a convalescent home.

The snakes in the Snake Park get tired, sick, and emaciated because of the presence of so many on-lookers, who seem in some unknown way to disconcert them. Then, too, it does them no good for Johannes to pull them so frequently forth for inspection. So those which seem to require a rest, good nursing, and feeding up are gathered into a bag and conveyed to the Snake Hospital ; and there, thinking themselves once again free from their hated enemy—man—they begin to feed.

Constant observation on the snakes is needed to keep them alive and save them from unnecessary pain and inconvenience. Sometimes one requires help to slough its old skin ; another is bitten by one of the

other snakes, but, instead of dying, an abscess forms, which has to be cut out ; sickly-looking snakes are oiled generously with the best olive oil ; a twisted or loose fang is a cause of annoyance to a snake, and has to be extracted. Some snakes, despite generous feeding, remain emaciated, and they are dosed with worm powder. The stomachs of some snakes contain a huge mass of parasitic worms which eat up nearly all the food the snake ingests.

When two snakes fight—and this is a common occurrence—we give each a dose of anti-venom serum should they be worth the cost and trouble. If not, they are left to take their chance of living.

Sometimes the man who styles himself the “feeder” succeeds in getting snakes to eat by dangling a dead chicken, bird, rat, or mouse from the end of a long stick. Once the snake seizes the food the job is done, because it then proceeds to swallow it.

The problems are endless with which we are confronted in keeping live snakes, and in pursuance of research work in connection with the job.

One of the lines of research which has been of exceptional interest is that of testing out the various snake venoms to ascertain their value in the treatment of diseased and otherwise abnormal conditions of the human body.

Dr. Ralf Sprangler, A.B., M.D., of Philadelphia, was the first man to call attention to the therapeutic value of preparations of snake venoms, chiefly in the treatment of epilepsy.

We pursued this line of research with the venoms of South African snakes first with solutions of crude

venoms. Then certain of the venoms were specially treated and blended, until eventually a formula was arrived at which, when used in the treatment of epilepsy, permanently eliminated the fits in a certain percentage of cases ; in others it reduced the intensity and frequency of the seizures in varying degrees.

Doctors soon began to note that this detoxicated venene, which was being used for epilepsy, actually cured what had been regarded as hopeless cases of chorea (St. Vitus' Dance) paralysis arising from other cases, neuritis, and rheumatism. The results of our work in these directions is summed up in a Paper given to the combined British and South African Associations for the advancement of Science at Cape Town in July 1929.

Since the publication of this Paper careful and exhaustive statistics and records have been kept, which amplify and confirm the results set forth.*

This preparation, the base of which is a combination of treated and partially detoxicated snake venoms, we most decidedly claim to be a great advance on, and a highly valuable adjunct to, all other known methods of treatment for epilepsy, chorea, and hysteria.

* These were given in a Paper read at the Annual Conference of the South African Association for the Advancement of Science at Grahamstown in July 1931.

CHAPTER III

Amazing enterprise of snake-stealer—Entering the “Garden of Death” by night—How the thief was captured—Obliging Catholic brother—A syndicate of snake-stealers—Their operations on the Snake Park—How they were rounded up.

READERS of fact and fiction are acquainted with much that is sensational, thrilling, and amazing, but the highest flights of the imagination of a Rider Haggard or a Conan Doyle could hardly conceive the possibility of a man stealing live venomous snakes for a livelihood.

The following is the story of this truly remarkable and altogether unique episode. Returning from a visit to Europe and the East Coast of Africa, I noticed the collection of live snakes in our Snake Park was not up to standard. The books revealed the fact that considerable numbers of snakes had been purchased. The occupants of the park were carefully counted and the deaths deducted. Yes, there was a serious shortage. Suspicion fell on Johannes, the Basuto Snake Park attendant, and he was shadowed. No clue to the mystery, however, was forthcoming until one of the several men who make a living by catching and selling snakes to us brought in a bag containing a dozen Puff Adders and some Boomslangs.

I wandered down to the Snake Park to see the reptiles liberated. The bag was handed to Johannes, and he shot its contents on to the

lawn grass in the park. Somehow, something seemed amiss, and, on focusing my attention, I realized that the snakes were not behaving as they ought to under the circumstances. They were supposed to be fresh from the veld, and should have lunged fiercely and threateningly at the leather-covered legs of the attendant, or scuttled off into the moat, subsequently to swim off in alarm and make desperate efforts to find a gap in the surrounding wall. No! On the contrary, they moved sluggishly away, apparently familiar with their surroundings. Cautiously questioning the snake-catcher, who was a European of about twenty years of age, named Halsey, I gleaned the information that the snakes had been caught in the adjacent demarcated forest. The following day I 'phoned the Forest Officer, who informed me that no permit had been given to this man to enter the forest reserve. Puff Adders are difficult to obtain in the neighbourhood of Port Elizabeth, except in this forest reserve, and the man surely must have poached them or lied to me. A week went by and Halsey once more appeared with a bag of snakes. Again they seemed to be unusually tame, but I held my peace and told the assistant to pay the usual prices for them. Then I laid my plans to encompass the snake thief's downfall. Three sturdy Kafir watchmen were put on night duty at the Snake Park with instructions, if the thief appeared, to secure him dead or alive. Then, unknown to anybody, I privately marked a hundred snakes in the Park so that I could subsequently identify them. This was no soft or cushy job. The reptiles had to be pinned down with a forked stick, one at a time,

gripped by the neck with finger and thumb, then, after securing the body firmly to prevent it struggling, one of the horny, abdominal scales was snipped with a pair of small scissors. Seven days went by and nothing happened. The watchmen were growing weary, and less eager to earn the five pounds reward I had offered for the thief's capture. They wanted the week-end off, and I agreed. Their last evening on duty was Thursday, and the thief turned up the following night. The next morning he presented himself at the Museum with a bag containing twelve snakes. An examination revealed my private marks on five of them.

"Did you capture these snakes yourself?" I asked.

"Yes, certainly; I caught them at Greenbushes" (a near-by locality).

"Had you an assistant?" I queried.

"No; I always go out alone."

I tried to draw him out to admit that he had a confederate—a certain man in another seaside town, who was a beach-tent showman and to whom I was certain he was supplying snakes stolen from us.

"Young man," said I, "you are fairly and squarely caged, trapped, tripped up. You have been snaffling our snakes for the past six months and selling most of them back to us; now it is our innings. You have brought in some snakes which belong to us. They have our private identification marks on them." He went through the usual old-as-the-hills performance of pretending to be indignant, and protesting his innocence. Heeding him not, I reached for the telephone receiver

and proceeded to 'phone for Detective-Sergeant Davidson. Then Halsey admitted his guilt and pleaded strongly to be let off. However, my heart was hardened against him. He had systematically robbed us for many months, and I had gone to a lot of trouble to show him exactly what to do should he get bitten while out snake-catching, and an expensive snake-bite outfit had been presented to him. It seemed this enterprising youth had been working for the beach showman in another seaside town, and was in the habit of catching snakes for him, hence his fearlessness in regard to these awesome reptiles.

In his operations on our Snake Park he always chose a dark night, and, scaling the high entrance gate, vaulted over the Snake Park wall and moat, calmly proceeded to pick up the snakes and place them in his bag. He was a good business man, for he always selected the species for which we paid the highest prices. Those we desired most were tree snakes, known as Boomslangs. These roosted in the shrubs, and Halsey disentangled them from the twigs with his bare hands, apparently, as calmly as a man picking fruit. Boomslangs possess highly subtle poison, but they are not aggressive snakes and rarely bite, unless roughly handled. But the stealer of snakes was in more deadly peril than he realized. We had several Cobras in the Snake Park, and they, too, roosted in the shrubs.

The Cobra has a bold, independent nature, and will not put up with any sort of indignity. If Halsey had laid his hand on one of these Cobras it would have instantly bitten him. A Cobra is able to inject many

times a fatal dose of venom ; and a bite with both fangs on the hand would have been fatal within an hour—possibly less. The venom paralyses the motor nerve endings, weakness and collapse of the muscles being an early symptom. Paralysis of the muscles after a bite by a Cobra would have been so rapid that, supposing Halsey had delayed to affix a ligature, he would most certainly have been unable to get out of the Snake Park ; and there his dead body would have been found in the morning.

It is rather surprising that he did not tread on a Puff Adder on the occasion of one of his many raids. These reptiles move about at night-time, and there are usually upwards of 100 of them in the Snake Park. The fangs are recurved, and half an inch in length ; the venom is of a most deadly kind, and death is slow, but sure. It is preceded by symptoms of a most terrifying and appallingly painful nature. But, ye gods !—think of it ! Is there another man on the face of this old world who would become of his own free will a burglar of a Snake Park and steal highly venomous snakes ; actually in cold blood leap over a wall into a confined space containing 1,000 of these reptiles lying about almost as thick as pebbles on a shingle beach ; then, in the darkness of the night, proceed carefully to select the high-priced species, and have the cheek and hardihood to sell them back to the owners the following day ?

In due course the prisoner was brought before the magistrate. The news spread, and the Court House was crammed with interested spectators. My Snake Park assistant brought in the stolen snakes and

dumped the bag down in front of the assembled lawyers and under the nose of the magistrate. Many cases came on and were disposed of ; but the legal men were uneasy, and the magistrate did not appear quite comfortable. Then our case was called and the Public Prosecutor called for the snakes

“Great Caesar’s ghost !” exclaimed a seasoned lawyer in alarm. “You don’t mean to open that bag here ?” When Johannes calmly proceeded to do so he gathered up his papers and departed, remarking that the Courts were chilly. Others shifted to a distance, and I saw several surreptitiously draw their feet up to the rungs of their chairs. Anyway, a Boomslang, five feet in length, was drawn forth and handed up to me in the witness-box.

I have handled snakes with bare hands for twenty-five years, and I am still in my mortal body. True, I have several scars from bites, but I don’t see anything at all heroic or even brave in holding these wretched reptiles. There is a knack in doing it, and expertness comes with experience. Of course, when people maul them about, hold them roughly, or attempt to kill them, they have a perfect right to retaliate. I am sure I would if a man trod on me or pinched me sore. Well, then, to return to the incident of the room. I held the snake over towards the magistrate so that he could get a close view of the identification mark on it, but, somehow, he didn’t seem inclined to make too minute an examination of the Boomslang, which seemed to him so sinister with its large unwinking eyes glistening in the light.

Halsey was sentenced to a month’s hard labour.

The public declared he ought to have got the Victoria Cross.

The report of this case was published in the *Eastern Province Herald*, Tuesday, January 20th, 1925, and in the *Port Elizabeth Advertiser*, Wednesday, January 21st.

Shortly after the story became public, a certain Catholic brother told me of an amusing incident connected with the snake-stealing episode. The brother was returning home late one evening after a vigil with a sick friend, and when right opposite the Museum entrance gate he was startled to suddenly see a man's foot and leg come into view over the top of the high gate. He stopped in his stride, and stared blankly. By now the body of the man was visible, and instantly the mysterious stranger calmly said, "Excuse me, sir, would you mind holding my bag until I get over?" Of course the courteous brother instantly acceded to the request. Alighting on the pavement, the stranger remarked that he had been to see me at the Museum residence, which is in the grounds, and, unluckily, found the gate locked, and not wishing to disturb me again, he climbed over.

"Thank you, sir, for holding my bag," and, raising his hat, he vanished into the darkness, while the innocent brother went his way, pleased at being able to render a fellow mortal a light service. But he didn't know the bag contained a collection of stolen snakes.

That young man's adventure has been eclipsed by another so daring, so amazingly bold and fearless, that the imagination can hardly conceive it to be

within the range of possibility. It happened in this wise : Three European boys, aged respectively fifteen, thirteen, and ten, formed a syndicate and scoured the neighbourhood of Port Elizabeth for live snakes, which they captured and sold to us. When there was a dearth of snakes they exploited the local trickling stream, which doesn't even trickle, but which the citizens of Port Elizabeth euphemistically call the Baakens River. In the isolated pools of this glorified sluit they found and captured frogs, tadpoles, eels, and little fishes, which they traded to us for stocking our aquarium.

The prevailing drought dried up the "river", and snakes were also becoming shy and difficult to catch. The members of the syndicate met and discussed the question. Money must be forthcoming to provide buns and ginger-beer, cigarettes and cinema matinées, and sundry other illicit requirements. Yes, the fact was plain enough ! Money must be found somehow. Scheme after scheme was proposed, discussed, and abandoned as untenable. Then up sprang Bill Jones, the leader, who, with a preliminary oath, dramatically declared : "I have it, boys ! No more weary foot-slogging over veld and koppie in the ruddy sun. Let's help ourselves to FitzSimon's snakes." "Let's !" exclaimed the other three.

Eagerly the details were discussed and decided on ; but the leader, alas ! had in him a streak of yellow. He was at heart a sneak and a coward ; but he was the elected leader, and the clan obeyed him without question or protest. He was a foxy schemer, with the crafty brain of a Cape jackal. He planned that

the small boys should do all the dangerous work, and that he share in the gains. The plan of campaign was launched, and it worked with amazing ease and success. Careful observation was kept on the Snake Park from different points of vantage, and when the coast was clear and darkness reigned over the face of the city, "Jannie", the boy of thirteen, scaled the wall and gained entry to the grounds of the Snake Park, while his two chums kept watch and ward outside, ready to give the agreed upon whistle should danger threaten. "Jannie's" operating paraphernalia consisted of a pillow-slip, a short bit of twisted stick, a wad of brown paper, and a bit of fencing wire four feet in length. The wire was curved at the end into a hook. Leaning over the wall of the Snake Park, "Jannie" hooked out a snake and dropped it on to the paved pathway under the pergola ; thrusting the bent twig over its neck and pressing the wad of brown paper hard on its head, he threw aside the twig to get a grip on the reptile's throat with his bare hand. The captive snake was then dropped into the pillow-slip, which was secured by knotting its upper end. Another snake was fished out with the bent wire, and so on, until a sufficient number to provide the gang with the sinews of war for a few days had been secured.

Be it noted, these daring youngsters' hands, feet and legs were bare. During the warm season of the year we have upwards of 1,000 live snakes in the park, and their poison fangs are intact. No attempt is made to render them harmless. Johannes, the native attendant, with hands protected by gauntlet gloves and legs encased in leather leggings, meanders

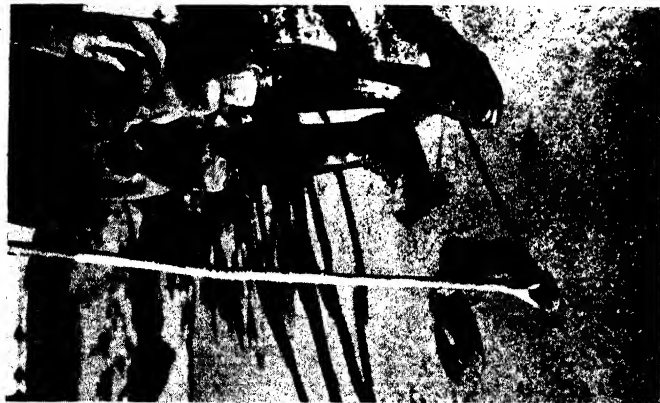
among the snakes the live-long day, ministers to their needs, answers the numerous questions of visitors, and collects snake poison occasionally for research work. Johannes is regarded as a bold and fearless man, who is not likely to die of old age. Yes, Johannes' job is a dangerous one, and there would not be a rush of applicants should the stroke of a snake drive his spirit prematurely out of his body. But the exploit of that bare-footed child, seizing large and powerful Puff Adders and Cobras with his little bare hands in the cold and uncertain glimmer of the moon, or the feeble light of distant street lamps, is almost too amazing to be believed possible ; yet it was so.

Poor little fellows, they, perchance, deserved a better fate than that which ultimately befell them.

On information received, we instructed Johannes' understudy, a native of rather superior intelligence, to do detective work. We named him "Christian", because of his innocent, solemn-looking eyes ; but, all the same, his looks belied him. He secreted himself in a shrubbery adjacent to the Snake Park and watched until late into the night. On a clear, cloudless evening, with the moon showing only half her face, Christian's brain was startled into activity by the crackling of a twig. Peering through the leaves, he saw a boy with bent back steal noiselessly along the wall to the Snake Park. Then he calmly walked into the pavilion, where the darkness hid him from view. From this point of vantage he fished out the snakes which were within reach of his wire rod. Christian saw him secure two adult Puff Adders and deposit them in his bag.



JOHANNES SHOWING AN ARMFUL OF SNAKES TO VISITORS AT THE SNAKE PARK. THE SERPENTS ARE ALL OF VENOMOUS SPECIES ; AND THEIR FANGS ARE INTACT. THE NON-VENOMOUS KINDS OF SNAKES ARE KEPT IN A SEPARATE ENCLOSURE



(1) IT IS PINNED TO THE GROUND WITH A FORK STICK. THE SNAKE IS A PUFF ADDER (*Bitis arvatans*)



HOW TO CAPTURE A VENOMOUS SNAKE
(2) THE SNAKE IS THEN GRASPED BETWEEN THE FOREFINGER AND THUMB



(3) WHEN NECESSARY TO TRANSPORT IT TO A DISTANCE, IT IS DROPPED INTO A LINEN BAG

A third was jerked out, but it proved to be so wild and fierce that the youngster could not fix it down. It lunged with bared fangs again and yet again, while its would-be captor sprang nimbly round, dodging its blows, watching a chance to break through its defence. The boy was so engrossed in his appallingly dangerous job of securing this serpent, whose bite is certain death, that he failed to notice Christian, who was standing with folded arms within two yards of him.

Jumping aside to avoid an ugly lunge by the snake, the boy, for the first time, saw Christian. Like the flight of a hare he raced away with Christian at his heels; but his luck was out, for the turnstile was locked, and while he was wriggling through Christian's hand descended upon him. On the still air of the silent night the child's scream of fear reached his brother, a sturdy little chap of ten years, who, thinking "Jannie" had been bitten by a snake and was in deadly peril, scaled the wall, and, seeing the dark form of the sullen Puff Adder barring his way on the paved pathway, made a flying leap over it and dashed into Christian's body. The brave little "Mannie", he assuredly deserved a better fate. Hearing the scuffle, the yellow-livered leader, who had been keeping himself well in the background, slunk away into the shadows of the night.

Both boys were brought round to my residence. They begged loud and long to be allowed to go home, promising never to steal snakes any more; but I had no faith in such promises. No, it was necessary to put a stop to this dangerous profession of

stealing venomous snakes in the dead of night. I knew the boys' father and mother, both of whom were honest, hard-working people. The father's occupation was such that he came in frequent contact with snakes, which he captured and sold to us ; and his forest-bred sons had no fear of these fearsome reptiles. The boys were handed over to a detective, and he got into touch with the father, who took the boys home.

The following day they appeared before the magistrate in his private office. The father declared the boy "Jannie" was entirely out of his control, and he could do nothing with him, and that he would be glad if the magistrate would send him for three years to a training institution. This was done, and the other boy was ordered to receive five strokes by the police orderly with the Court cane. The leader of the gang, curious to learn of the fate of his pals, mingled with the crowd in the Court lobby. "Jannie" presently caught a glimpse of him. "There's Billy! It was he who put us up to it," and he pointed to a dense crowd of people. Billy took the hint, and before a constable could lay the heavy hand of the law on him he was off and away. The policeman, shod in official boots, was no match for Billy, who was soon out of sight.

On being questioned after conviction, the three bold little stealers of snakes made the statement that they had been operating on the Snake Park for about four months. The snakes were usually stolen in the manner already described, but not always. When

they brought in snakes for sale, my assistant, in the kindness of his heart, let them roam round the Snake Park free of charge. At the end of the large enclosure there is another long, narrow one, where all the smaller species of snakes are confined. The wall is low, and the snakes are mostly within arm's length. One of the boys had a bag concealed under and attached to the lining of his coat. While his chum kept observation on Johannes, the other fellow snapped up the live snakes and thrust them into this bag.

My assistant looked over his receipts for the four months and found that these enterprising youngsters had received £48 in payment for the snakes they stole from us during that period of time.

CHAPTER IV

Johannes of Schildpadfontein—His career as Snake Park attendant—Some of his adventures—Bitten by snakes and fined—How he salved money from mud—The Python mystery—Johannes and the Prince of Wales—How a Cobra got Johannes stone cold.

Who is Johannes, anyway? As well ask, "Who is Dingaan?" Why! Johannes is the Basuto attendant at the Port Elizabeth Snake Park, known to every tourist to South Africa for fifteen years, and, by reputation, to everybody else.

Johannes is almost certainly the most photographed man in South Africa to-day.

From Schildpadfontein, his home in the Transvaal, where he was registered in the local magistrate's record as Johannes Modikive, a Basuto, he ventured forth to battle his way alone.

Various have been his occupations to win enough coin to provide the wherewithal to live. From shepherd boy to a Kafir chief, he became in succession kitchen boy, bottle and glass washer in a bar, handyman in innumerable stores, and then down in the bowels of the earth at Kimberley digging out blue ground; between times tramping from dorp to farm and town, cold, miserable, and starving, seeking vainly for work.

Then came the South African War, and for Johannes it was a time of plenty. He secured a job as ammunition-van driver in Kitchener's column. Then for the first time in his life he "ate real white man's food, and lots and lots of it".

Johannes went right through that war, and finally entered Pretoria, where he was disbanded, much to his regret. Then came the usual chequered life of a Kafir with a wanderlust, questing from town to town, alternately working, starving, tramping, sleeping under culverts, in dry ditches, huts of friendly Kafirs, with odd jobs of work in between. Finally he gravitated to Port Elizabeth and got a job as garden boy at the Museum. Big, gaunt, and uncouth, not knowing a weed from a flower, he was not a success as a gardener. But I saw possibilities in Johannes, and smiled, or pretended to, when he pulled up precious sprouting bulbs or spread red ruin elsewhere in the garden.

Taking him from this uncongenial work, we initiated him into the art of picking up live snakes and assisting generally in the laboratory, where at the time we were testing out the numerous world's "sure cures" for snake-bite, and sundry other allied jobs.

Meantime, a Zulu named Makazani, but whom we called Alfred, was carrying on the work of Snake Park attendant. Taking undue liberties with a Cobra, it made a vicious lunge and bit Alfred on the cheek. Into my office he staggered, collapsing on the floor. There didn't seem a hope of saving him, but after a dose of anti-venom serum had been injected into the

unconscious man's veins, and one dose subcutaneously, he slowly rallied.

Five days later he disappeared, leaving no trace, and three years elapsed before the mystery was solved. A letter arrived from New York, and in it he related that he got a job as kitchen boy on a barque in Algoa Bay, and at the time of writing he was a waiter in a New York hotel.

"Baas, gimme Alfred's job," solicited Johannes, and so his career as Snake Park attendant started ; and that was fifteen years ago.

Of course it takes time to learn all about a finnick and expert job like that, and during his apprenticeship he entered the valley of the shadow of death many a time.

On sixteen occasions has that son of Ham been bitten by venomous snakes, and he still lives to smile. Non-venomous snakes bite him almost daily, but he heeds them not.

One day he annoyed a Python fresh from Zululand and full of the fire of the wild. Pythons are not venomous, but they have an armature of two rows of needle-sharp recurved teeth. The Python lunged with gaping jaws and caught Johannes full upon the cheek, the force of the blow sending him sprawling. Grimly the Python held, groping for a stranglehold, while we did our level best to neutralize this, meanwhile snapping off the embedded teeth one by one ; and so at long last the victim was released. Then came the tedious job of extracting those teeth from Johannes' face muscles, and finally sterilizing the bleeding wounds. That little episode

meant three weeks in Blighty. This didn't end his adventures with Pythons. Poking about in the hot-house, he trod on a Python concealed in the litter. Pythons are gentle and usually inoffensive, but resent being trodden upon, especially by a Kafir's big, hard, nail-studded boots ; and so it retaliated by constricting his leg, gripping his ankle in its jaws, and throwing a succession of coils up the leg. Then it squeezed. If you haven't been embraced by a Python, then pray heaven you may never have that experience.

I once fell on top of one while climbing a rock-strewn hillside in Natal. I didn't mean to, of course ; it was quite an accident, but we both rolled heaven knows how far, and when I opened my eyes to see what heaven—or the other place—was like, I found I was still in the mortal body and that the Python had fled. Anyway, coming back to Johannes, he shouted loud and lustily for help, but it took several of us to unwind that Python, and Johannes had a week in bed and a bad limp for a long time.

One day, when busily engaged in my office, Johannes staggered in unannounced. "Baas, hims got me !" he cried. Yes, and got him it had. Contrary to orders, he foolishly picked up by its tail a wild Puff Adder fresh from the veld ; and with a lightning stroke it drove both fangs to the hilt in the top of the thigh at its junction with the body.

Rapid action was needful, for Puff Adder venom makes the blood-vessels porous, and at the same time it dissolves the corpuscles. Profuse and fatal bleeding into the abdominal cavity was imminent. The sites

of the punctures were laid open and permanganate of potash rubbed in. Then serum was injected all round the spot and into the surface tissues of the abdomen above the wounds. He lay semi-conscious for half a day, and then began to rally. The crisis had passed.

It was three weeks before Johannes' leg was fit for duty, and vast was his astonishment and chagrin when we fined him ten bob for picking up a wild Puff Adder by its tail, without permission to do so.

Shameful! Yes, it was in a way, but Johannes soon forgets he has been bitten by a snake unless we fine him. The loss of money rankles, and, knowing it, we play upon his weakness.

There is a moat round the inside of the wall which encircles the Snake Park, and in it grow lotus lilies and other aquatic plants. In consequence of these and other debris and sediment, the bottom of the moat gets covered with mud, and so every three to five years the water is drained off to clear it out.

Johannes is sometimes, but not often, excessively energetic, and he dearly loves to loaf around and gossip to the dusky maids who smile so sweetly at him with pearls, much to the annoyance of his lawful wife. So, thinking to do Johannes a good turn, we told off his understudy and a garden boy to do the cleaning of the moat. Johannes was mightily aggrieved.

"No, baas," exclaimed he, "me clean it myself, baas!"

Astonished, I compromised, and agreed that he and one of the others undertake this dirty job.

The reason for Johannes' reformation was soon apparent. Sauntering down to the Snake Park to see how the work was progressing, I saw Johannes diligently sieving the mud with a stout mason's sieve.

"What the blazes are you doing?" I exclaimed.

Johannes grinned sheepishly. "Baas, me want to find money; plenty money in dis mud, baas."

It seems, in tipping the boy, visitors throw short, or the coin slips from their fingers and is lost in the moat. In silver and copper £4 17s. 9d. was retrieved, and Johannes helped himself to seventy-five per cent. of it, as was only right and proper, he being the rightful owner of the coin.

They say circumstantial evidence has often sent folk to durance vile. Johannes was once a victim. We blamed him for leaving the electric light burning in the Python House at night. He stoutly denied this. He seemed genuinely puzzled, ill at ease, and generally unsettled. "Baas," said he, "me no sleep at night," and in his jumble of broken English, Afrikaans, and Basuto, he explained that somebody must have a duplicate key and was doing the ill deed to get him into trouble; else it was some malignant spirit, possibly one who had incarnated in the body of a Python. But the light was still found burning almost every morning, and so Johannes was fined twenty shillings.

Two nights later the mystery was solved. Sitting on a seat under a moonflower tree at the Snake Park rather late one evening—alone, mark you—I was surprised to see the Python House suddenly lit up.

In a moment I was at the window, and through a small gap in the white frosting on the glass the sinner was revealed. A Python had switched on the light with its chin. It was quite easy. The snake, in exploring the walls for some possible avenue of escape, had discovered the switch and hooked its chin over it, automatically pulling down the knob. Johannes got a refund, and twenty shillings extra for mental salve.

When Johannes was new to his work he came unusually near to losing his life and his job. He was unaware that the deadly Ringhals Cobra, otherwise known as the spitting snake, sometimes simulates death when it believes itself to be in danger.

Johannes goes into the Snake Park an hour before opening time each day to turn the reptiles out of bed and to tidy up and collect all dead snakes. He picked up, with his bare hand, a Ringhals Cobra which was shamming death, and when about to toss it into his basket it gripped him savagely by the thumb and held on, as is their nature.

So astonished was the victim that, instead of plucking the snake away, he tried to shake it off. Meanwhile the reptile was busily pumping charge after charge of venom into the fleshy part of the ball of Johannes' thumb. Two drops of Ringhals venom is a fatal dose for a strong man, and at one rapid bite through the rubber-covered top of a wineglass we have frequently collected eight drops of venom. Johannes must have received at least six drops—three times a fatal dose.

My residence is in the grounds, and lucky for

Johannes it was, because within thirty minutes of the bite we had given him an unusually big injection of anti-venom serum. The serum does not contain poisonous preservatives, and so it is possible to inject any quantity without ill effects.

Johannes lay unconscious for two full hours, hardly breathing, while I sat near waiting for the final struggle for breath. Instead, he opened his eyes and remarked with a smile, "Me all right now, baas."

Next morning I went round to his house and found the bed empty.

"Where's Johannes?" I asked of his wife, in alarm.

"He gone down to Snake Park, master."

There I found him, busy getting ready for the day's work.

"Why aren't you in bed?" I demanded.

"Bed ! Baas, me not sick any more."

After an examination of the pupils of his eyes, his pulse, and a test of his breathing capacity, I found him quite fit.

Johannes was not impelled by a sense of duty to start work so soon, nor was it an excess of energy or thankfulness for still being alive. It was solely because it was the day of the arrival of the mail boat, which means a crowd at the Snake Park, and baksheesh in plenty.

We sometimes go to dances on Saturday nights, or indulge in some other godless relaxation, which results in late rising next morning. One Sunday morning there was a gentle knock at my bedroom door, and Johnson, the house boy, announced

quite as unemotionally as though it was the bath that was ready : "Johannes is outside, master, and has been bitten by a snake." Not waiting to put anything on, I took the stairs three at a time, to find Johannes meekly sitting on a step of the stoep. Yes, it was a Puff Adder this time, and the bite was with both fangs, deep into the muscles of his forearm.

"How long ago?" I demanded.

"About an hour, baas."

"Why the h—— didn't you tell me at once?"

It seems he didn't like to disturb me, and thought he would wait until I came down.

Owing to its habit of spitting venom in a fine shower to a distance of six feet or so, we now perform an operation on all Ringhals Cobras before putting them in the Snake Park. Otherwise, it would be unsafe both for Johannes and visitors to have them there.

The operation used to be done by me, but having become expert at the job it was turned over to the lay assistant. Johannes, with the indifference of the usual South African son of Ham, failed to put on his goggles once too often when assisting at this operation, and an indignant Ringhals Cobra spat in his face, blinding both eyes. Never before has Johannes even groaned or whimpered when we carved him up, and stuck needles into him after his various snake-bite episodes, but the pain on this occasion was so acute, he groaned aloud and invoked the spirits of his father and his mother to help him. Promptly we bathed his inflamed and blood-red eyes

with a weak solution of permanganate of potash and water. Pads of lint soaked in olive oil were then applied to his eyes, and finally a bandage. Three weeks it was before he regained his sight, and then only because of the care and attention he received from his wife, who watched and tended him like a guardian angel.

One day a movie picture man arrived with instructions from the Government to take an extensive film of the Snake Park for Government tourist propaganda purposes overseas.

Johannes gathered up two armfuls of Back-fanged and non-venomous snakes, and was duly filmed for one of the series.

Taking "movies" is a trying and delicate job, and before the camera-man was through with his work the snakes had started exploring Johannes' person. The stolid chap, like the Roman sentry at Pompeii we all learned about at school, thought it his duty to stand still until the picture was finished. When the job was ended to the taker's satisfaction and the snakes released, Johannes confided to me that some of them were under his shirt. He was piloted from the Snake Park to the adjacent Python Hot-house by two attendants, who kept careful watch lest any snakes should be shed *en route*. Once safely in the Python House he slipped off every stitch, and thirteen snakes of sundry species were recaptured.

Johannes, when resplendent in his outfit of python-skin boots, leggings, cap, and uniform trimmed with snakeskin, glories in explaining all he knows about snakes to overseas and other visitors, who lean

eagerly and interestedly over the low wall. In doing this one day he rudely shoved aside a big Leguan (Monitor lizard) intent on a sun bath. Resenting the indignity, the reptile struck out with its tail, hitting Johannes round the legs so energetically and promptly that he fell into the centre pond and crawled ignominiously out, with lotus lilies and Florida devils clinging round and on him, with the Cobra he had been giving a lecture on gripping the lapel of his coat.

Royalty who have honoured South Africa with a visit all know Johannes personally, and the tips they give him are hoarded up in a secret place known only to himself.

"Why don't you tell your wife where the money is, in case of sudden death?" I asked.

He answered with a voice conveying absolute finality: "No, baas, hims might pinch it!"

The purse of money the Prince of Wales thrust into his hand on parting is Johannes' special treasure.

"Why don't you spend the money or put it into the Savings Bank?" I suggested.

"No, baas," said he; "me keep hims till me die, den me leave hims to my son."

One day he was in deadly peril. The bottom fastening of his legging had come undone while he was kneeling on the ground cutting out weeds from the grass in the Snake Park. A Cape Cobra, seeing what appeared to be a dark and safe retreat, glided furtively between the back of the legging and the boot.

Johannes wasn't aware of the fact until he felt

the cold, clammy body of the snake between his loose breeches and bare leg. Glancing hastily over his shoulder, he saw the protruding tail of the Cobra. He knew that so long as he remained immovable the snake would not bite.

Calling cautiously to the man in charge of the turnstile, he despatched him in quest of me—mean-time remaining on his knees, while the snake lay alongside his bare leg, questing here and there with its head. This was indeed a knotty problem, but one which brooked of no delay in solving. Admonishing Johannes not to move, I leapt the wall, grabbed the exposed tail, and at the same instant jerked the snake out and cast it away.

Johannes was more subdued than usual the rest of the day, while I retired to the Museum café to soothe my nerves with tea.

Johannes is regarded as a bold and fearless man, who is not likely to die of old age.

Yes! Johannes' job is a dangerous one, and there would not be a rush of applicants should the stroke of a snake drive his spirit prematurely from his body.

CHAPTER V

Snakes and suffragettes—Food of snakes—Hibernation—How rats killed Pythons—Stolidity of live Pythons—Cannibal Cobra—Forcible feeding of snakes—How the author got bitten by a Puff Adder—Snake-catcher's adventure—The teller of stories—Slang Tuin—Boomslang and his wife.

THE brain centre of firmness is active in most men, except where the opposite sex are concerned ; but, unfortunately, it is left to degenerate into unreasoning stubbornness, especially so in party politics, and town council meetings, and in the home. Women possess it in a somewhat lesser degree than men, and they, too, become impervious to logical argument. But it is not common to the human race alone. Snakes are stubborn, too. When deprived of their right to lurk round our homesteads, creep into our bedrooms, and bask in the paths which we are apt to tread, they invariably become stubborn when they are captured and sold to the Port Elizabeth Snake Park.

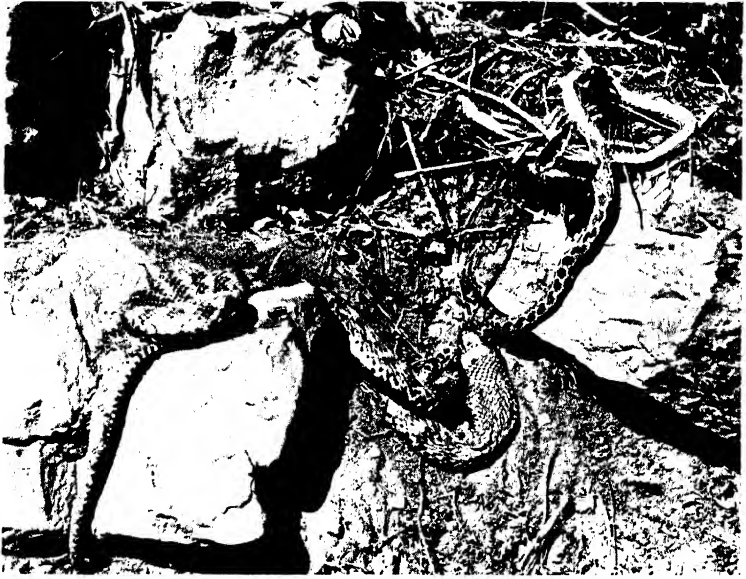
The outcome of this manifestation of that tiny speck of grey matter in their brains is a positive refusal to take food.

The suffragettes of pre-war days believed they originated this form of passive resistance ; but they were wrong. It has been a common trait of snakes for at least as long as I have been on intimate terms with them, and that's quite a while.

My parents died in Natal while I was yet a child ;



PLAYING WITH DEATH. THE SNAKE SUBSEQUENTLY SPAT IN JOHANNES' EYES, AND HE WAS BLIND, IN CONSEQUENCE, FOR THREE WEEKS, SUFFERING EXCRUCIATING AGONY



THE RINGHALS COBRA (*Sapedon haemachates*) CAN SPIT VENOM IN A FINE SPRAY TO A DISTANCE OF EIGHT FEET. IT IS HERE SEEN

- (1) IN THE ACT OF CAPTURING A SCHAAPSTEKER (*Trimerorhinus rhombeatus*), WHICH IS A SOUTH AFRICAN DUTCH WORD FOR SHEEPSTICKER
- (2) SWALLOWING ITS VICTIM

but my aunt and grandmother, who had the care of me, had a deep-rooted objection to my love of snakes. It was then I noticed how difficult it was to persuade a tame snake to eat. Drink? Yes, they drank water freely, but the majority of species refused to take food. The Python was the most stubborn of all. Happy, apparently, in a large wired enclosure with abundant sunshine and the trunk of a tree, or pile of boulders to lie on, they disdained even their most favourite food. A cane rat is as attractive to a Python as a bit of scented fluff with a smiling face is to the average male of the human species; but, no, the snake would merely eye the tempting morsel with indifference. Confine the cane rat with the Python for days and the one would take no notice of the other. It is curious, yet true, that the various creatures on which snakes prey show no fear at all when confined in a fairly large space with them. After the initial alarm at being thrust into a strange cage, a rabbit, fowl, or guinea-pig takes not the slightest notice of its fellow prisoner. Wild creatures, such as rats, exhibit the same characteristics, with the exception that they become terrorized when a human being approaches the cage. When a snake takes its prey there is usually the minimum of suffering. One or more coils are thrown round the victim, and its ribs are so severely crushed that it cannot breathe; and it dies immediately.

Should the snake be of a venomous species, a prick of the fangs and the injection of a droplet of venom causes almost instant paralysis and death. True, in some instances rapid death does not occur

when the prey is a reptile. A frog dies almost at once after being bitten ; but a garden toad struggles lustily until it is swallowed. Even then, if the swallower be killed and the toad removed, it will come to life again and hop away, believing it had dozed off and the whole occurrence was an unpleasant nightmare. So it is, also, when two non-venomous snakes, with but a single thought, decide to make a meal one of the other. The victor swallows his victim alive ; and if it be taken out, or pulled out just before the disappearance of the feebly squirming tail, it will not be dead, or even hurt, except, perchance, mentally. Snakes feed on living prey, and so, too, do a multitude of other living creatures. It, seemingly, is a cruel scheme of Nature to create a vast multitude of forms of life to provide food for one another ; but the object of it stands out clearly. It makes for the *At* standard of efficiency, and provides the mainspring for the slow but steady upward evolution of life to forms increasingly complex spiritually, mentally, and physically.

No creature in the wild dies of old age. The moment it ceases to be able to fend for itself, or fight off or otherwise escape from its enemies, it dies.

Man is the one exception. By means of his intellect he is able to keep most of his enemies of the lower world at bay. In many ways, unnecessary here to detail, he prolongs the mortal lives of his fellows ; but he has to pay Nature's penalty. The human race, in consequence, has degenerated physically, and in multitudes of cases, mentally too. But this is a digression from the feeding habits of snakes.

When the present Snake Park was created, our troubles multiplied proportionately. During the warm season of the year we invariably have a stock of about 1,000 live snakes, all South African born. Snakes are very low forms of life, with tiny brains and an insensitive nervous system when compared with that of any species of warm-blooded animal. During the winter months snakes cease to eat, and hibernate. At this time, then, reaction to pain is considerably lowered ; and when the temperature is very low their nervous system does not react to any stimulus. During the season of their greatest activity they, apparently, are incapable of suffering pain, as we know it.

Pythons in captivity will allow themselves to have titbits eaten out of their bodies by hungry rats, and yet they lie unmoved, placid and unresentful. One day I watched a big rat gnaw away the skin of a Python and feed greedily on its beautiful white flesh. Cruel to stand by and let it do this ? Perchance yes ! But curiosity overcame all other feelings. Besides, if the Python did not object, why should I interfere ? One snap of its jaws would have killed the rat ; but all it did after the lapse of about five minutes was to disengage its head from among the coils amid which it was buried and with one eye make a casual inspection of the rat. Then it turned its head and had a look with the other eye. After an interval of thought it thrust the rodent off its back with its nose in quite an indifferent manner. The rat came back and was again pushed off ; but the creature was hungry, and therefore insistent, and the flesh of the Python

tasty, so it resumed its meal. Then, in a leisurely way, the Python once again thrust its head among the coils of its big body and dozed. The Python, I thought perchance, was sick, disgruntled with a loveless captive life, and that the average virile, healthy Python would most certainly retaliate effectively if a miserable, hungry rat began to lunch off the tenderest portions of its body.

But disillusionment soon came. At one of the corners of our Snake Park there is a solidly-built pavilion specially erected as a hot-house for Pythons. There they doze or move sluggishly about in a gratefully warm atmosphere. Johannes goes in daily to see if all goes well with them ; and one day, when poking about in the hay on the floor, one of the Pythons constricted him. We concluded it had been dreaming of cane rats, hares, duiker bucks, jackals, and other forms of luscious diet, and instinctively it threw its coils round the leg of the native when he put his clumsy foot on it. Discovering the victim was of the dreaded murder-loving humans, its heart failed, and it relaxed the huge coils, much to Johannes' relief. That Basuto boy is the bane of our lives. He has strict injunctions not to venture into the Python House during the summer season without an understudy within call. He will be missed one of these days, and I expect we shall find his half-digested body within the stomach of a Python. However, the day following this incident fifty striped field-mice, or streep muis, were put in the Python Pavilion. They took no notice whatever of the reptiles, and regaled themselves on the meat and corn provided

for their consumption. When alarmed by the entry of Johannes, they often scuttled away and took refuge in the spaces within the folds of coils when a Python was at rest. On the fourth day Johannes came into my office, and his face had an unusually serious expression.

"Baas ! Igundane hims eat Pythons !" So, sallying forth, I inspected the victims. Three Pythons lay dead, and a fourth was dying.

"Tell Christian to skin them and let me know when the job's done," I instructed.

So Christian, who isn't by any means Christian-like by habit, skinned the Pythons, and the cause of the tragedy was revealed. The rats, during the silent watches of the night, had punctured the Pythons in innumerable places and greedily lapped up the blood which oozed from the punctures. Why did four Pythons, full of the fire of life, lie inert and let those rats suck them dry ? Most certainly they did not suffer much, if any, pain, else retaliation swift and sure would have resulted. Many years ago we kept a number of live snakes at the old Museum in the Market Buildings, for observation and experiment. They were in glass-fronted cages, each four feet square. Eleven sullen Puff Adders occupied one of those cages, and the season was midsummer. The caretaker had caught a big grey rat in a cage-trap ; and, after closing hours, he dropped it in the Puff Adder cage and hiked away home, expecting the rat to be quickly killed and devoured. Next morning he couldn't believe what he saw with his eyes. Wiping his spectacles, he thrust them on

again, and peered into the cage. Seven burly Puff Adders lay dead, and the rat, with bulging sides, was coiled, fast asleep, in a recess of the tree stump. Inspection of the bodies showed the brains of the snakes had been pierced by the rat's canine teeth, and the tenderest parts of the heads and bodies eaten. Why did that rat kill seven snakes? Was it merely the lust to kill; or because certain parts of the snakes' bodies were specially attractive? Apparently the latter was the dominant motive, because the poison glands and soft white flesh lying at the junction of the backbone and outer base of the ribs had been eaten.

Men have ever preyed on the weak and helpless of their own race; and so, too, do snakes. The agile Cobra and the vicious Puff Adder, armed by Nature with a potent death-dealing apparatus, attack, kill, and devour non-venomous and other more or less defenceless snakes. But it is not always the venomous ones which prey on the non-venomous, because, should one of the latter consider itself sufficiently strong, it attacks a weaker brother, suffocates it by constriction, and makes an enjoyable meal of it. But, like some of the bad folk of our race, snakes sometimes become over-confident, and calamity befalls them.

There used to live in our Snake Park a Geel Slang, which some people call a Yellow Cobra. This big fellow preyed on the defenceless Schaapstekers until there wasn't one left. Then it sampled the Night Adders, ate one or two, and did not like their flavour. It then turned its attention to a Mole Snake, but the

latter in its death struggle nearly choked the Cobra to death with its coils ; and so Mole Snakes were taboo. One day a Black Mamba arrived, and the Geel Slang soon began to take a disturbing interest in its movements. On a quiet morning just before opening time, I sauntered along to the Snake Park before starting to work at the Museum.

“Baas,” Johannes cried excitedly, “Geel Slang, hims fighting Mamba !”

Sure enough the two were engaged in mortal combat.

“Let them fight it out, Johannes,” I commanded, forgetting I was supposed to be civilized and to frown upon all forms of violence ; but, I ask you, has anyone ever met an Irishman who doesn’t love to be in a fight, or to watch one ?

So Johannes and I watched the duel. The Mamba was fresh and fit, having recently arrived from Zululand ; and the Cobra was sleek and well-nourished. The latter faced its opponent with head and the anterior part of its body upright, while the Mamba, with body raised slopingly from the ground, swayed gently but with deadly import ; then, like a flash of black lightning it struck, and the Cobra fell with the force of the blow ; but in an instant it was up and upon the Mamba. Both lost all caution and closed, biting one another wherever they could get their fangs home. Presently the Mamba weakened, struck feebly, and, turning over and over, it died. Without even resting a space after so fierce a fight, the Cobra proceeded to swallow its victim head first. Telling Johannes to call me

if anything unusual happened in the process, I retired to the sanctity of my office. Half an hour later Johannes came to the door and placidly remarked, "Baas, Geel Slang hims dead." So it proved to be. When the Cobra had swallowed two feet of its meal it, too, died of the venom of its victim which it had received into its flesh during the battle.

All snakes are not cannibals, but most of ours are at times. However, seeing we get no outside financial support to run the Snake Park, we cannot afford always to feed the bigger snakes on the smaller species, for which we pay from 2/- to 5/- each. Johannes kept a note of the meals of that big cannibal Cobra covering three months, because I wanted to know for scientific reasons. This is a copy :

			£	s.	d.
7	Schaapstekers	@ 2/6		17	6
1	Mole Snake	5/-		5	0
2	Night Adders	2/6		5	0
3	Brown House Snakes	3/-		9	0
1	Boomslang	5/-		5	0
2	File Snakes	7/6		15	0
1	Egg-eater	3/6		3	6
1	Black Mamba	20/-		1	0
			<hr/>		
			£4	0	0
			<hr/>		

Shakespeare, or someone else who mattered, said : "The sight of means wherewith to do ill deeds make ill deeds done." So, believing this to be sound advice, we isolated all the smaller species of snakes. There are certainly some bullies and cannibals among them ; but the loss of two or three a day doesn't matter overmuch. The majority of our snakes go on hunger strike, even in the presence of their natural

food ; so we resort to forcible feeding. It's easy work with the Pythons. Johannes squats his body down upon the lawn adjacent the Python House, with two assistants, whose job it is to hold the snake's tail and body to prevent it embracing Johannes. Meanwhile he shoves nice raw streaky beef, dead rats, or pieces of poultry down its throat with a polished rammer. When the feeding has been accomplished, a ligature is applied between the meat and the reptile's head to prevent it disgorging. When the indignant snake has calmed down, and that comfortable feeling of a good meal nicely digesting sets in, the ligature is removed, and no more forcible feeding takes place for a month.

I used to take a hand in feeding the Mambas, Puff Adders, and Cobras ; but I have not done it for a long time. My wife used to nag me all the time about it, urging there was no necessity, because the assistants could do it just as well, and better ; but it was a relief to the endless and multifarious work entailed in running a museum ; and besides, the other fellows had to be shown and carefully watched lest a clumsy slip should send them forth into the spirit world unprepared, and before their allotted time. It is easy enough to forcibly feed snakes when you know just how to do it ; but it requires a lot of practice.

There are several ways of carrying out this job of work successfully.

One day a medical friend was present when I was feeding a Puff Adder at my residence in Natal. He kept on asking questions ; and so my attention was

somewhat diverted. The snake, feeling a slight relaxation of my grip on its throat, freed itself with a twist and a jerk, and retaliated by driving both fangs home in the base of my thumb. That was before we had a serviceable serum, and, in consequence, my left arm has never since been so strong as it might otherwise have been. It turned out to be a good thing, anyway, because at that time I was too ready to settle a nasty argument with my fists ! All the same, it was anything but pleasant to stroll about or sit and lie around for some twenty hours waiting to see whether the venom was going to drive me forth from my mortal body, which I did not wish to lose so prematurely.

Another way by which we feed our more valuable snakes is by inserting a funnel down the throat and pouring egg-flip into the larger end. This is easier and safer than the other way.

A third method is by means of a glass syringe. It is filled with eggs well beaten up, and the nozzle and a portion of the barrel are gently thrust down the snake's throat. The liquid food is then discharged. For Pythons, a huge metal syringe is used.

A European who earned a precarious and dangerous living by catching snakes and selling them to us was accosted one day on his way home by a Harbour Department policeman. Slung over his shoulder was a pillow-case containing three Boomslangs, two Puff Adders, a Ringhals Cobra, and a Schaapsteker.

It appears a great deal of pilfering had been going

on for some months from the goods sheds, and a constable had been specially detailed to keep a sharp look-out. He was dressed in plain clothes, so that he would not attract attention or suspicion.

Detecting this European snake-catcher slouching suspiciously along from the direction of the goods sheds on the Harbour Department grounds, he shouted, "Hey, there, you fellow, come here !"

The man addressed sullenly responded, and the other truculently demanded, "Watcher got in that bag ?"

The man spoke so offensively that the snake-catcher—who, by the way, was an Irishman—told him rather forcibly it was none of his business. But this only riled the guardian of other men's goods, and he violently demanded that the contents of the bag be displayed forthwith. The man objected, declaring the contents to be his lawful property.

"Come, now ; no more of your blasted lip. Show me what's in the bag, or I shall arrest you."

Making a sudden and unexpected grab, he jerked the bag out of the other fellow's hands. With a quick movement he opened it ! Thrusting in a big fat hand, his fingers dug down among the snakes ; at the same instant the three Boomslangs made a bid for liberty, and, incidentally, in their desperate desire to escape, slithered over his shoulders, brushed against his face, dropped to the ground, and escaped among the railway trucks, causing a gang of native labourers to stampede.

The constable was not bitten, but he thought he was ! That and the shock completely prostrated

him, especially so when a Puff Adder fell on his toes, while another, dropping to the ground, glided away. The snake-catcher sent for a taxi and took the man home to his loving wife, but he was careful not to tarry or relate details.

That same wife turned up at the Museum two days later.

"Sir," said the caretaker, "the wife of that policeman whom the snake-catcher told you about wants to see you."

"What's she look like?" I asked uneasily.

"She's a big, tough-looking woman with hair on her chin," said he.

"Holy Mary, give me strength!" I murmured. Aloud I said boldly, "Show her in."

"Are you the boss of this blinking show?" she truculently demanded.

"Yes," I answered meekly, "I am."

"Well, then, I want you to know my husband has been two days ill in bed; and he isn't better yet."

"Why, what's wrong with him?" I asked.

"What!" she shouted. "Didn't your man tell you he emptied a bag of live snakes over my husband's head? Poor darling, he will never get over it," and she pretended to weep.

Then she demanded compensation, and lots of it. But when I explained that the man was not in our service, and that we only bought snakes from him, she calmed down. Finally the lady departed, vowing the most horrible vengeance on that snake-catcher, who, by the way, was lurking at the time in the assistant's

office listening. For months the man pursued his daily life of snake-catching in fear and trembling, lest the woman should waylay him. She very nearly captured him one day ; but he was too nimble-witted. It appears she had discovered he usually came down a narrow back lane on his way to the Museum the morning after a day's snake-catching. She waylaid and sprang out on him. When a woman of that type gets a finger-grip on your coat it's usually serious. But he slipped out of it, and, snatching up his bag, he sped away. He is a flat-footed chap, and isn't any good at running, and the woman, picking up her skirts to give free play to her limbs, gave chase. The fellow, realizing he would very soon be overtaken, and knowing his dearest friend wouldn't recognize him after she had glutted her ire upon his person, he utilized his last defence ; opening his bag, he took hold of it at the bottom and scattered its contents over the roadway, and that proved a barrage which most effectively checked the onrush of the woman. Meantime, the man beat it as fast as he was able.

"And what became of the snakes?" I asked, when he related the incident to me.

"God knows, sir, I don't."

"But you should have gone back and tried to find at least some of them."

"Not me, sir."

"Why?"

"All the folks in that stinking lane would have been as ready to rough-handle me as the woman who chased me" ; and I agreed.

Everybody relishes a good yarn with lots of pep, ginger, and spice in it, and few bother to pause and question its veracity. No, that isn't quite true. Fish and snake yarns are generally regarded with suspicion. I am not much of an angler, and have, in consequence, imbibed every fish story with the relish and faith of a hungry infant taking its ration of mother's milk. But having been brought up in Natal, among snakes, and with them all round me in cages and enclosures where they could run wild within limits, I have naturally got to know most things about them, and the subtle venom they distil.

When you know the innermost thoughts, characters, and habits of snakes, untrue snake yarns, alas, fall flat ; and when the teller becomes dogmatic and asserts they are true, one's bristles are apt to rise.

Once, when lying in the depths of an armchair in the smoking-room of an ocean liner, a chappie started to tell snake stories. Soon everybody in the room encompassed him about, for there is nothing interests men more than a good snake yarn. The storyteller was relating an alleged experience with a Black Mamba.

"Yes," said he, "there it was in a tree ten yards away, fixing me with a black and evil eye. I had lost all power of movement, and stared unwinkingly at the reptile. Realizing I was about to pass into a hypnotic trance, I turned, and with a last effort of will looked away. Instantly the spell fell from me, and, whipping out my automatic, I fired a stream of bullets in rapid succession at the head of the serpent. I am a dead shot, gentlemen, and can snuff out cent

per cent of candle-flames with bullets at ten paces. But not a bullet hit the snake ; it dodged every one of them. Reloading, I again fired ; but in quicker succession, with no better result. The Mamba saw the bullets coming every time, and evaded them."

Was the yarn true ? Of course it wasn't. The teller of it and other still more unbelievable stories about snakes, subsequently learned who I was, and we entered into a blood brotherhood of secrecy.

But, really though, true snake stories are far more interesting than those which are untrue.

Truth is stranger and seemingly harder to believe than fiction, and notably so in regard to the ways and habits of the lower forms of life, which we term beasts of the field, denizens of the ocean, and loathsome insects. Why, the life history of a common caterpillar, grub, or fly is by far more interesting and remarkable than that of hosts of the hairy-headed mammals we term men.

But this is a digression, because I set myself out to tell true snake stories.

My wife sometimes looks in of a night when I am busy writing in my private office in the Museum or at the residence, and demands to know what I am doing.

"Writing an article," says I.

She glances at the stuff and promptly sits down, fishes out a gold fountain-pen lying among lipsticks, powder-puff, and heaven knows what not, from a bag she always carries round with her wherever she goes. I am awfully curious to know what's in those bags which women nurse so lovingly in the crook of their arm.

Once my wife caught me poking about in her bag with my forefinger, and—well, enough said ; I haven't done it since.

But you just ought to see how she sometimes cuts up my manuscript. "You mustn't use slang ; that's too common ; something else . . ." and so she goes on !

But let us get on with our true snake stories.

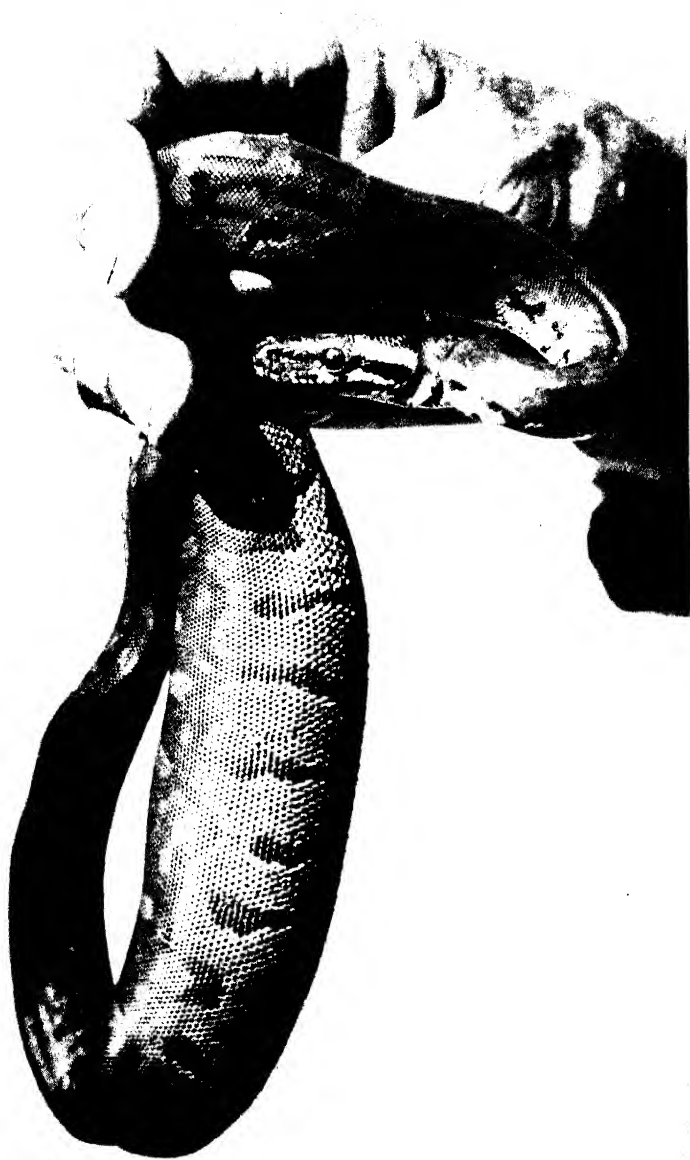
Everybody who is anybody knows we have a Snake Park at the Port Elizabeth Museum. We left space on the entrance pavilion for a title in English and Afrikaans.

"What's the Afrikaans for Snake Park, sir?" queried the signwriter.

Then I discovered there wasn't a South African word for park. To call it "Slang Park" seemed to be too much of a compromise ; so we termed it "Slang Tuin", which means Snake Garden.

Yes, indeed, it is a garden where the wistaria, passion flowers, and t'koma twine over and about the pergolas. Incidentally, there are snakes there—yes, literally droves of them during the warm season. They are all South African bred and born, and one of them is a Boomslang. He is the fellow who lives in trees and robs birds' nests, eats up the parents too ; and that wonderfully useful little insect-eating lizard friend of ours, the chameleon, which folk believe to be venomous, but, on the contrary, is the most innocent and harmless of creatures, except to noxious insect life.

One day a Boomslang and his wife took up their quarters in the leafy top of a big aloe. Here they



WHAT A BABY PYTHON LOOKS LIKE AFTER SWALLOWING A RAT



AFRICAN PYTHON (*Python sebae*) AFTER SWALLOWING A DUIKER BUCK, WHICH IS AS LARGE AS A FULL-GROWN SHEEP

lived in peace and harmony after the manner of human folk. Never was there a quarrel, a cross word, or any disposition to sulk one with another. They bathed on warm sunny days, swam in the moat, or meandered in and out among the lotus and papyri, and hunted frogs when the pangs of hunger became too clamorous to be pleasant. The husband was a fine and handsome chap. The coat which covered his graceful and willowy form was of the brightest leaf-green, shot with black and velvety yellow ; and his eyes were exceptionally large and gloriously sparkling.

With head gracefully poised he would regard the numerous visitors boldly and unflinchingly. His wife was certainly as graceful in form and as lithe as he, but her costume was of common chocolate-brown. In the lower animal world it is the male who has to do all the courting, and invariably he has to fight like a devil from the pit, and court like mad, if he doesn't want to be left a lonely bachelor.

So that's why the menfolk of the creatures of the wild are usually so bold and handsome, in comparison with their women.

CHAPTER VI

Inquisitive Paddy—Questions and answers about snakes—
How the Night Adder found a meal—Stealing other snakes'
lunches—Water Snakes' revenge.

"It must be interesting to get so many letters," remarked Paddy, when the postman deposited a pile of them on my desk.

I glanced up to see if she was having a little joke, but she seemed earnest enough, and I saw no mischievous glint in her eyes.

"Interesting !" I almost shouted. "If you got a pile like that every day of your life for fifteen years you would not say that. Why, half those letters will be from people asking questions about snakes !"

"But surely that is interesting," she insisted, womanlike.

"Yes, perchance to you it would be, but if you saw hundreds of live snakes every day and talked to folk about them like I do, answering the same questions over and over again, you wouldn't think so," I wearily remarked. "Why, bless your heart !" I exclaimed, "the very sight of me suggests snakes to everybody. Whenever I show myself, or wherever I travel, I am spotted and pinned down to answer questions about snakes. Once, on top of the Eiffel Tower, I bumped into a fellow I knew, and, after a shout of greeting, he began to ask questions about snakes."

"But that is very interesting surely, and the farmers, I suppose, are especially keen?"

"Yes," said I, "they even drop the discussion of politics and forget to go home to their wives if anybody starts talking about snakes."

Warming up, I proceeded to relate how I went on a quest to the Karroo to secure the skeleton of a Cape Bushman, or, rather, woman, which was partly exposed in the side of a donga. I was motored back to Klipplaat in a 1913 Ford, the only original part of which was the engine and wheels. On our arrival at the station at eventide, I learned there wasn't a train back home until 4 a.m. There had been a stock fair, and consequently the bar of the hotel was packed with farmers. I went in to get a drink, pulling my hat well down, and furtively advanced to the counter.

"Excuse me, sir, are you FitzSimons, of Port Elizabeth?" queried a big farmer.

Being reared to regard Washington as my ideal—or was it Washington, by the way? Anyhow, it was the American chap who, itching to try his new axe, chopped down one of his dad's best cherry trees, and when his irate pater asked him if he did the blankety job he took a deep breath and proudly exclaimed, "Yes, father, I cannot tell a lie." So I reluctantly admitted that that was my name. But, all the same, I enjoyed the night with those jolly farmers. I sat on an upturned barrel and answered questions until 3.45 a.m., and nearly missed the train.

"What were the questions?" Paddy queried with eager interest.

"I will relate a few of the answers if you wish," I observed.

"Gosh, that's fine ; go ahead," she said.

Question : When young Puff Adders are born do they burrow out of the sides of the parent and does she always die in the process ?—*Answer* : No, the young are born in the usual, normal manner of animals, and the mother does not die. From a dozen to about thirty are produced at a birth.

Do snakes sting with their tongues ?—Snakes do not sting at all. They bite and inject the victim with venom by means of a pair of hollow or grooved fangs connected with poison glands.

Are all snakes poisonous ?—No, many are harmless, others are slightly venomous, and the rest highly venomous.

Of what use are the snakes ?—To help maintain the balance of Nature. Many kinds eat rats and mice.

What kinds ought we to protect ?—The Mole Snake and House Snake and File Snake feed largely on rats and mice. These are non-venomous. The Python is also harmless, and it is invaluable to the sugar-cane planter because it feeds on the cane rat and ordinary rats which devastate the cane.

Does a Puff Adder bite backwards ?—No. It throws its head back to get a purchase for a powerful forward thrust.

Can a snake leap from the bare ground ?—No.

Is there a snake which takes its tail into its mouth, and bowls away like a hoop ?—No, but there is a Grass Snake which is very swift, and, when making

off over the matted grass, has the appearance of a hoop.

Is there a snake which has a jewel set in its head?—No.

How high can a Cobra rear?—Half its total length.

Does the Schaapsteker kill sheep?—No ; the name has been wrongly applied.

Do snakes suck milk from cows?—No.

Do snakes drink milk?—No, except when water is unobtainable.

Do all snakes produce young?—No ; some kinds do, while others lay eggs. The Puff Adder is an example of the former, and the Boomslang of the latter.

Is there a two-headed snake?—No, not normally.

Is there a snake known as a Dassic Adder?—No.

Where do snakes go in the winter-time?—They crawl into holes, hollow tree-trunks and other shelters, and remain dormant until spring.

Are snakes immune to one another's venom?—No.

Is a snake immune to its own venom?—Not if a very strong dose is injected into its flesh.

Are snakes deaf?—No ; they hear fairly well, but best by vibrations of sound conducted through ground, tree, or water, owing to having no external openings to their ears.

Does a sea-serpent exist?—Yes ; but it only grows to about ten feet. There is one species averaging three feet, which is often found in rock pools round our coast. It is as venomous as a Cobra.

How does a Python kill its prey?—By constriction. The victim is seized with the jaws. It is not necessary for the snake to get a leverage with its tail.

When a snake is fatally injured does it always remain alive until sundown?—No; but it will sometimes linger a long time unless the head and brain are crushed.

Where does a snake get its poison?—It is manufactured by, and stored up, in a pair of glands situated in the head of the snake.

Are snakes cannibals?—Yes, most of them are.

Can a snake close its eyes?—No.

Does the snake-stone which is used in India draw out the venom from a wound?—No.

How long would a man live after being bitten by a snake?—It depends on the species of snake, and the quantity of venom injected into the victim.

Are any of the native and other popular “cures” for snake-bite of value?—No.

But surely some are, because thousands of people believe in them.—Sorry, but I happen to have tried out every one of them, not once, but many times, and in various ways. Some are just useless, harmless substances; others are injurious.

How would you treat snake-bite?—Slit open the flesh over the fang punctures along the course of the muscle, rub in permanganate of potash, apply a ligature above knee if bite is below, or above the elbow if bitten on the hand or forearm, and inject anti-venomous serum. Loosen the ligature progressively for a few hours, and then take it off. Never leave a tight ligature on for more than half an hour.

Do not use a stick or tourniquet. It is quite sufficient if you draw the ligature tight with your hands, and even then do not use too much force.

Is alcohol any use in snake-bite?—Alcohol does far more harm than good. In cases of Adder bite it is exceedingly harmful, because it promotes haemorrhage into the tissues and body cavities.

Why is it especially harmful in Adder bite?—Because the venoms of Adders and Vipers dissolve the red blood corpuscles and at the same time expand the blood-vessel walls and make them porous. Alcohol temporarily stimulates the heart, causing extra pressure of blood, inducing more severe haemorrhage. It also retards the elimination and oxidization of the venom. When serum is injected, alcohol must not on any account be given.

A favourite method of treating Mamba and Cobra bites is to sjambok the patient to keep him awake. Is this a good plan?—No; it exhausts him and reduces his power of fighting the venom. A subcutaneous dose of strychnine does no harm and may do good. The only cure, however, is anti-venomous serum.

If snake poison is swallowed, will it kill?—No; it does no harm in a healthy stomach. It is digested the same as food.

What is the difference between Cobra poison and Adder poison?—Cobra and Mamba venoms are nerve poisons, Adder venoms are blood poisons. In the case of the former, there is no swelling, while the latter causes extensive swelling and discoloration.

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Disentangling himself from a miscellaneous heap of other snakes basking in the sun's rays, a Night Adder slithered away on a quest for food. There are but two forces in a Night Adder's life which are sufficiently powerful to induce him to bestir himself, and those are the pangs of hunger and the urge of sex, and so our Night Adder started off to look for a meal which would suffice for breakfast, lunch, and dinner. The chances of success were small, and he knew it, but snakes are philosophical folk, and, should food not be forthcoming, they do not worry. A day, week, or month foodless is not unusual ; but when three months drift by in the summer season and a snake has not succeeded in capturing a dinner, then he really does begin to feel peckish.

In his meanderings in and out of the rocks of his abode at the Port Elizabeth Snake Park the Night Adder disturbed a frog which, with a prodigious leap, sought safety in the moat ; but his pursuer was upon him, and, after a short struggle, the process of engorgement began ; but alas ! a second Night Adder was questing for a meal, and spying the kicking legs of the victim, she seized one of them and began ingesting it. Reaching the top of the thigh, and finding it impossible to proceed further, she lapped in the second leg. All went well for a period, but the inevitable happened. The opposing noses of the snakes met in the middle part of the frog. Woman's wit is nimbler and brighter than that of man's, and while he was wondering in his slow way what to do, she gaped wide her jaws and, with a forward heave, lapped them over the head of the rightful owner of

the dinner. Then he awoke to his danger. He knew full well that if he did not succeed in getting free he would be entombed by a slow and lingering death, similar to the gallant lover of a mediæval baron's beautiful wife when walled up by the infuriated lawful owner of the lady's person and affections. Summoning all his strength, the victim of the lady snake's subtle strategy writhed and tugged and lashed his sinuous body round. He coiled and uncoiled, threw his weight about, but all to no avail.

It was apparent the woman had him in her power. She intended to have the frog, rightly or wrongly. When a woman sets her mind on anything, she usually gets it, but the man-snake was young and callow, else he would have hastily spat out his frog and fled. In the struggle he was at a distinct disadvantage, for his opponent not only had her recurved teeth in the back of his neck and throat, but she was his senior in years and of greater length too. Slowly he weakened, and in the intervals of his struggles she sucked and thrust him down. Steadily, and almost imperceptibly, his body disappeared, while ever and anon he marshalled his ebbing forces and struggled violently. Drawing up the muscles of his body, and securing a grip of the rough ground with the anterior edges of his abdominal body armour, he pulled long and steadily, but it was all of no avail, for every time he attempted this manoeuvre Eve set her jaws hard and fast. The minutes fled, and half an hour passed with the victim half swallowed. Times out of number he remonstrated by feebly wriggling his tail. A second half

hour hastened by before the end of the tail vanished from mortal sight.

Why did we not intercede and rescue the victim? Why, indeed, should we interfere with the processes of Nature? The frog devours poor little worms, slugs and beetles and others of its kind smaller than itself, and why should not the Night Adder lunch off a frog if the latter is unfortunate enough to allow himself to get caught? But then, had the other snake any right to rob her colleague of his lunch? The human race prey in diverse ways upon one another, so why, then, should not a lowly snake do likewise? Nature works for the A₁ standard of efficiency, both mental and physical. It is only the human race that has degenerated to the C₃ standard.

Stealing other snakes' rightful lunches is a strong trait in the character of the Night Adder, at least in the Port Elizabeth Snake Park, but the profession bristles with risks. The Night Adder does not always come off victorious. One day a harmless Olive Water Snake, who bears the terrifying classic name of *Boodon infernalis*, was busy absorbing a frog. A Night Adder, who was too indolent to catch a nimble frog himself, saw a chance of obtaining a satisfactory lunch in an easy manner. So in a furtive, apparently indifferent way, he sauntered obliquely past the Water Snake, then, with a lightning-like snap, he seized a back leg of the disappearing frog. The Night Adder was twice the girth and length of the owner of the frog, but the latter nevertheless put up a strenuous fight. He tugged, pulled, squirmed and lashed, but to no avail, and when his struggles ceased the Night Adder

proceeded to imbibe his stolen meal until his nose came into contact with that of the Water Snake. Instantly his big jaws gaped and lapped over the head of his rival. The alarmed and indignant Water Snake put forth all his strength to disengage.

Long and furiously he fought to release his head from that relentless grip. Then he collapsed, exhausted. This was what the Night Adder was patiently waiting for, and with a succession of gulps, accompanied with a strong forward thrust, he swallowed a good four inches of his victim. Inside that cavernous mouth the Water Snake was busily thinking. Yes, he had it. Why not choke his would-be murderer? No sooner thought than done, and four coils of his strong little body were thrown round the throat of his foe. His ancestors, for untold generations, had captured and killed their prey by constriction.

So tighter and yet tighter the coils were drawn until the Night Adder was unable to breathe. Then he became suddenly aware of his peril, and long and lustily struggled to free himself. Back and forth he beat his snake-constricted head. He rolled, lashed, coiled, and employed every artifice known to his tribe. Then he lay still, his only hope being that his opponent would smother first, for, be it remembered, the Water Snake's head and four inches of his body were inside the Night Adder. The human onlookers grew excited; a lady began to grow hysterical, and unconsciously embraced her man friend. Twenty minutes flew by. Surely this remorseless struggle could not continue any longer? One or the other must surely die of suffocation.

Half an hour fled, then a further ten minutes, when, with a convulsive movement, the Night Adder lashed and threshed with his tail, turned over and over, and died. Slowly the Water Snake uncoiled. A muscular quiver in the body of the Night Adder caused a rapid retightening of the coils, but the powers of endurance of the victor were waning. He finally uncoiled, straightened out his form, gripped the uneven ground, and pulled with all his remaining strength until his imprisoned head and neck were released. Without a moment's delay he made for the water, slithered into it, and vanished among the lotus lilies. Nature, yes, she is indeed red in tooth and claw. That one may live another must die. The struggle for life is unceasing, and the unfit and the laggard perish by the wayside in the lower animal world.

CHAPTER VII

The adventures of a Puff Adder—Snake fights—Snake-eating Leguan—How it met its fate—South African Mongoose and how it fights snakes.

A PUFF ADDER arrived at the Snake Park in a way which the most ingenious of inventors of stories would never guess. A farmer sent it from the Midlands of the Cape by train, securely confined in a small wooden box.

Once daily a railway goods delivery van brings our belongings, which are mostly boxes of live snakes, up to the Museum, which is a mile distant.

The van was loaded with parcels for the various business people of the city ; and, presumably, while these were being delivered along the main street the one containing the Puff Adder dropped out and fell into the gutter unnoticed ; else it was delivered in mistake to a storekeeper who, discovering the nature of its contents, secretly got rid of it. Anyway, be that as it may, when the rubbish removal men emptied the contents of a garbage tin into their wagon, one of them, in sorting over the rubbish to see if there was anything of value to take home to his wife, picked up the dirty box and turned it inquisitively over and over. Yes, it was carefully nailed up, and it did not need much imagination to conclude that there was something in it. He shook it vigorously, but the contents seemed to be solid. Then he prised up one end of the lid an inch or so, and applied an eye to the

aperture. His glistening optic apparently alarmed the Puff Adder, and it hissed. Have you ever heard a Puff Adder hiss ? No ? Well, then, take a six-inch wire nail and a hammer and drive a hole in the pumped-up tyre of your friend's motor-car ; pull out the nail, stand aside, and listen ; then you will know what a Puff Adder's hiss is like.

"May the saints preserve us !" muttered the terrified fellow.

Thereupon he rolled off the cart, falling flat upon the road, and, springing up, ran as if red devils were after him. But his overseer was shrewd and far-seeing. There was Scotch blood in him, many generations back, and this blood is stout stuff and not easily eliminated. He carefully put away the box and subsequently brought it up to us at the Museum, where he got 5/6 for it, and another 5/- for hush-money ! The name and address of the sender was on the box ; and we also received a letter notifying us of its despatch, and so bang went another 5/6 in rightful payment for the snake.

The Ringhals Cobra is not unduly quarrelsome when in captivity, but he has a habit of eating other snakes smaller than himself.

One sunny day a Mole Snake was passing by when, without provocation, a Ringhals Cobra seized him by the waist and clamped his jaws hard down, driving the fangs fully home. The Mole Snake struggled wildly to shake off that deadly grip, but when the Ringhals Cobra bites with intent he does not let go, and is not easily shaken off. Finding his efforts to dislodge the aggressor to be futile, the intended victim paused

awhile and deliberated. Then, calmly as though it was an everyday occurrence, he embraced the Ringhals neck with two of his silky coils. The Mole Snake is a constrictor, and Nature has given him wonderfully supple muscles which contract at will.

Letting go his hold on the Mole Snake's body, the Ringhals tried frantically to withdraw his neck from the embrace ; but the coils grew increasingly tight, and it was soon apparent the Mole Snake had got the upper hand, and that the Ringhals was slowly dying of suffocation. Putting forth all his strength in a last expiring effort, the latter tugged, pulled and lashed, but all to no purpose. The Mole Snake, however, was not taking any chances. He knew right well the ways of snakes, and how the Ringhals and some other species of wild creatures sham death ; so he just lay still for a further period of time. Cautiously, very slowly, and the coils slackened, the snake meanwhile alert and ready instantly to tighten them up should the victim show the slightest sign of life. Suddenly he relaxed, disengaged his coils, and slithered away.

But alas ! Next morning Johannes announced, "Himsdead, baas." Yes, killed by his opponent's venom.

A Leguan, or Monitor Lizard, was sent to us alive, and it was put into the Snake Park, which, seemingly, was an ideal place for it. Here it feasted on frogs, meat, and eggs ; and, between times, basked in the sun's rays. Soon it lost the nervous dread and fear of our race, which is engendered in all wild creatures by brutal and cowardly persecution. Whenever Johannes

came near it lashed furiously at him with its tail. When a snake disturbed its slumbers it would stand up, brace its tail well back and let fly, sending the astonished snake hurtling yards away.

"Baas," remarked Johannes one day, "Leguan, hims eating snakes."

Yes, true enough, it first started on innocent, inoffensive Schaapstekers; then poor harmless House Snakes, Mole Snakes, Egg-eaters, and others which were incapable of defending themselves.

"Feed it with meat and eggs, and it won't eat snakes," I advised.

But the snake-eating habit had already been formed; and before we could provide suitable accommodation for it elsewhere the Leguan attacked a Puff Adder—not a small chap, but a real whacking big fellow. It bit the snake, and the snake naturally bit back; but the latter's stab glanced harmlessly off the tough back of the lizard. Then the latter began to beat the snake with its tail, raining blows in quick succession. But the serpent was by no means overcome. Driving sideways, it got in a good bite on the top of the Leguan's back leg. This only infuriated the Lizard the more, and, closing in, it seized the snake by the head and beat it upon the ground until it was dead. It then proceeded to devour the victim's body.

For a full week the Leguan dragged a paralysed and swollen limb about, but, emboldened by its victory over so formidable an antagonist, it attacked a second Puff Adder after it had recovered fully from its former encounter. But this time the snake was fresh from the wild and in tip-top condition.



THE SOUTH AFRICAN PROTOTYIE OF THE FAMOUS SNAKE-KILLING MUNGOOSE OF INDIA. IT SLEW TWO CAPE COBRAS (*Naja flava*) IN RAPID SUCCESSION. IN A COMBAT THE FOLLOWING DAY THE COBRA OBTAINED A DEATH GRIP ON THE TONGUE AND LIP OF THE MUNGOOSE. IN THIS INSTANCE IT WAS THE MUNGOOSE THAT DIED



The Leguan launched the attack by delivering a slashing blow with its tail. The now angry and indignant snake drew back, hissing defiance ; then, swifter than the human eye can register, it struck a sidelong blow, and both fangs went home in the Lizard's side. But its triumph was short-lived, for a sweeping stroke of the Leguan's tail swept it into the moat, and the conflict ended. The snake lay sullenly upon the water, hissing its hate, while the Leguan retired from the combat, only to die five hours later ; and a post-mortem revealed the frightful haemolytic effects of the venom of the Puff Adder.

We reared a South African mongoose (*Mungus pulverulentus*) for the sole purpose of ascertaining exactly how it attacked and overcame snakes. The principal food of this bold and fearless little fellow consists of snakes, rats, and mice, and it is little short of a crime—nay, indeed, it is a crime—to do so brave and useful a creature to death. But as well command and expect the incoming tide to recede as to ask the average uneducated person to refrain from persecuting and murdering inoffensive creatures of the wild.

Ordinary snakes stand not the ghost of a chance against the attack of a mongoose. He invariably just rushes in, seizes the snake's head and chews it off.

But the Cobra is a formidable antagonist, and such liberties cannot be taken with it.

When attacked, the Cobra instantly makes for a clear space and faces its foe, unless the latter is too quick and obtains a grip on its head before it is able to assume the defensive.

The mongoose circles round the snake, ever seeking

an opportunity to close in. The reptile anticipates this manoeuvre by turning on its own axis, facing its foe all the time. Then the mongoose begins a series of rapid feints to induce the Cobra to strike and expend its reserve energy. Again, and many times again, the snake aims a blow, and, missing, it recoils and is erect and threatening, so that the mongoose is unable to seize its head, which is its aim and object. This badgering goes on for a longer or shorter period according to the size, strength and fierceness of the snake. The watcher presently notices the snake's recoil and recovery is not so rapid as formerly; and knows, too, the battle is nearing its end. The snake strikes, and before it can withdraw the mongoose runs in, seizes it by the head, and all is over. The head is forthwith chewed off and swallowed; else it is sufficiently mangled to put the snake entirely out of action. The victor usually rests awhile before making a meal of its victim's body. Should the snake be a large one, the mongoose dines off it many times.

The venom of a snake, when swallowed, is not poisonous to the mongoose; nor does it confer immunity to snake venom, for the reason that, being an animal protein, it is digested. Venom has to get direct into the blood-stream unchanged before it can exert any toxic effects.

But the Cobra proved a poor fighter compared with a Puff Adder. The latter, when faced by the mongoose, retired instantly into a corner of the roomy cage and faced its foe with head drawn back and slightly raised. The mongoose, finding it could not circle round the snake, began the process of badgering,

to induce its antagonist to strike. Blow on blow the snake delivered after the manner of its kind—a terrific forward or side lunge and rapid recoil—but all to no purpose. There is no animal known which is so quick and agile in its movements as this little mongoose and its indian cousin. Every muscle is tuned to the highest pitch of efficiency ; and the rapidity of action and movement is truly phenomenal, so much so that it is unbelievable unless seen.

The mongoose is not immune to the venom of snakes ; but, like most other carnivorous animals, it is unusually tenacious of life, and can survive a dose of venom which would kill a fowl, turkey, goose, or rabbit in a few minutes.

The mongoose, in its battles with snakes, relies on its thick fur, tough fibrous skin, alertness and strategy.

After numerous successful battles with Cobras and Adders, my little mongoose died tragically. After a fight with a Puff Adder, which lasted three-quarters of an hour, it overcame the snake, but, while in the act of chewing up the head, the victim, with a last expiring effort, drove one of its fangs hard down and into the base of the tongue of the mongoose. The latter seemed to know its number was up, because, after releasing its tongue from the fang, it retired to a corner, hunched up its body, and sat immovable except for the rapidly moving, brilliant eyes, which kept everything within sight under observation. Thus it sat for a period of three hours ! Then a series of spasms shook its body, and it turned over on its side and died.

CHAPTER VIII

The Cobra that disappeared—Contents of a parcel and the sequel—How the overseas mail was held up—Train conductor's adventure with a Cobra—Python loose in a train—Mamba amok on Johannesburg station platform.

I HAVE railed to you three exceptionally fine cobras, and I trust they will arrive safely and that a good price will be paid for them.

So read a letter from a farmer who catches snakes for us.

"Sir," said the assistant in charge of this department, "the box has arrived, but there are only two Cobras in it."

"The third must have escaped on the way down," said I.

"No, sir. The box was one of ours, and the lid was carefully screwed down and locked."

"Write and tell the chap who sent them that only two snakes arrived, and that he must have miscounted them."

The sequel came three days later when one of the Cobras got indigestion and vomited the third, which he had swallowed whilst in the box !

Those who capture and send snakes to us are now supplied with special boxes. But formerly they came in old tin cans and the most nondescript type of box.

It seems incredible, but one day a Ringhals Cobra was delivered to us in a cardboard boot-box, one end of which was broken in. The snake, instead of taking advantage of this avenue of escape, pushed itself into the opposite end where it was dark. In due time the postman brought it up to us in his big knapsack and handed it over in all innocence.

We didn't let on, however, what the parcel contained, because the chappie looked pallid, underfed and nervy ; and knowledge of this sort isn't good for such folk.

"What old 'Fitzzy' doesn't know about snakes isn't worth knowing." So my kind friends sometimes say.

My wife, of course, often calls me a fool ; and one day, when I thought I had accomplished a really tough job, she came into my office and grouched about the Museum floors and cases not being shiny, and that the Museum in general had a neglected appearance, and so on. . . .

So I started moodily to slit open the afternoon's letters.

It is one of my secretary's jobs to open parcels, and he had carried several into the "lab" for that purpose.

"There's a lovely green snake in one of the boxes, sir," he remarked. So I went to have a look at it. It was among some dead leaves and grass—beautiful emerald green in colour.

"Yes," I said, "it is one of the biggest Green Water Snakes I have ever seen. Get the tape measure and see how long it is."

After entering up this item of knowledge in a

diary, I thought I might as well carry it down to the Snake Park.

"Big fellow, that Water Snake," I remarked to Johannes.

"Ya, baas, hims very nice one ; where him come from ?"

This I didn't know, so I went back to the office to continue opening and reading the correspondence, until I came to a letter which made me feel creepy and goosefleshy. I read :

I am sending you a very nice specimen of a Green Mamba. I captured it at great risk, etc., etc.

The letter was from a locality where Green Mambas are common.

Hastening to the Snake Park, and catching the alleged Water Snake, I examined its head-shields. Yes, true enough it was a horribly venomous Green Mamba, and I had handled and caressed it with my bare hands, letting it climb over my shoulder and hitch its blinking head over the top of my ear !

Then I knew my wife was quite right. I was one of the greatest of fools that ever was born, playing with a Green Mamba, believing it to be a harmless Water Snake !

One day the local postmaster 'phoned the Museum, and my secretary replied.

"I want to speak to FitzSimons, and it is extremely urgent."

So the telephone was switched through to me.

"That you, FitzSimons?"

"Yes," replied I, "it's me."

But I will tell you all about it in my own way. The conversation over the telephone might be a little difficult to reproduce.

It was mail day, and all the canvas bags which contained parcels from overseas were dumped on the floor of the sorting-room. Each bag had a strong leather band round its open end, which was fastened securely with a big padlock. One of the bags was opened and its contents lay on the floor in a large pile. Meanwhile a horde of sorters was at work.

Everyone was pleased and happy, until suddenly out shot a number of live snakes which scattered in all directions. Every sorter had but one single thought, and that was to beat it as fast as his legs would carry him. The foreman stormed, raged and swore, but the sorters were adamant.

"No blooming fear," remarked one; "not for a thousand quid would I go in and sort out those parcels!"

"I tell you, Bill," cried another, "the bag was full of those ruddy snakes. I saw them with my own blinking eyes!"

A head official was then summoned, but even his forceful threats failed to move the sorters.

"But," he cried, "don't you know that this means the sack for every damn one of you? It's mail day, and every parcel and letter must be sorted and delivered; it will hold up the business in the city!"

It seems the mail arrives during the morning, and

the outgoing mail leaves the same afternoon. A queer sort of arrangement, but there it was.

Now why should such a colossal fuss be made over a few live snakes wandering round the sorting-room? They are harmless unless you tread on them or take other liberties.

The situation was saved by my lay assistant and his understudy going down to the post office. They sorted over the parcels one by one; and, after a thorough search, five European Black Snakes were found and bagged. It appears they had been sent to the Museum by an enterprising dealer in London, who wished to swap them for South African snakes. The box in which they were confined got slightly damaged in transit, so they were all loose in the sack when its contents were shot out. The postmaster and his men wished to be definitely assured that there were no more snakes roaming round; but such assurance I felt I could not give.

"I don't know anything about them," said I.

"But," he exclaimed, "they were addressed to you."

This was obvious, but, all the same, I hardly expected live snakes from abroad; and no letter concerning them had been received.

So the days went by, and the postal people were kept in a state of tension.

The following mail brought a letter informing me that five snakes had been sent; and this welcome news was communicated to the postmaster.

One day the conductor of a goods train, bound for

Port Elizabeth, began sorting and checking up the parcels with his waybills so as to have them ready for dumping on the platform at their respective destinations. This operation was started after leaving Uitenhage, which is about twenty miles from Port Elizabeth.

There is not overmuch daylight in a railway van, and in turning over a parcel to look at the label, a Cape Cobra reared his body among the parcels and, with hood expanded, hissed in the face of the man. Fortunately, in an extremity of fright, the conductor fell back among the luggage. You needn't laugh ! I ask you—what would even the toughest and bravest of men have done ? Imagine, if you can, a poor old chap thinking his day's toil was nearly at an end, and, with a mind half-full of the delights of home, a loving wife, obedient kiddies, a nice supper, slippers warming by the fire, cosy armchair, and an Edgar Wallace novel. Anyway, the shock of seeing a large Yellow Cobra, with hood expanded, within six inches of his face was so great that the conductor hastily picked himself up from among the packages and climbed round to the back of the van and to the roof, where he sat holding insecurely to a projection. On arrival at Redhouse the official wanted to know what the blazes he was doing up there ?

A crowd had gathered by this time—the usual crowd of idlers. An explanation was made, and we received a 'phone message from the stationmaster to the effect that a live Cobra was throwing his weight about in the van ; and please be sure to have a man at the Port Elizabeth station to meet the train.

Another time the offender was a Python, but the conductor didn't seek refuge on the roof; he made his way along the footboard to the nearest railway carriage and took sanctuary in a crowded compartment. The alarm soon spread, even to the driver, who saw that the train arrived on schedule time all right.

Johannes was again requisitioned. Hitching the great Python over his shoulder, he strode like a Hercules through the main street of the city, up the hill, where the aristocracy live, to the Snake Park, followed by a motley but admiring crowd.

It was a busy time at Park Station, Johannesburg, and most people were flocking away to seaside resorts to escape the midsummer heat and to have their annual wash in the sea.

In the midst of all this hurry and scurry, the loud, penetrating shriek of a woman rent the air, repeated again and yet again. Other women screamed in sympathy. Men spoke in hushed voices. Then arose the hoarse shout of a porter. "Snake! snake! Live snake!"

Someone else yelled: "Mamba! Mamba!"

Everybody knew what "snake" meant, but folk who think all day in terms of wool, groceries, soft and hard goods, whisky, women, and sweep tickets, wouldn't know what "Mamba" referred to.

However, there was a general rush for the exits, and within a few minutes the platform was cleared, with the exception, I was told, of one solitary Scot, who sturdily stood his ground carefully guarding his luggage!

It would take a chapter of many pages to describe the adventures of that Mamba before it was finally overtaken in a tobacconist's shop and caught alive. There happened to be a Natal farmer in the crowd who was used to Mambas and their ways. He declared he had known Fitzzy at school, and was jolly well going to capture the Mamba—and so he did ! A box was procured, and it finally reached the Snake Park. It turned out that it had been consigned from Zululand to a certain zoo. But this fact we didn't know until some time afterwards.

CHAPTER IX

Black Mamba the Attila of snakes—Trapped in a room with a Mamba—The Green Mamba—Adventures with Mambas—Mamba fatalities—How the author fell upon a Black Mamba—Hair-raising experiences with Mamba—A race with death—Johannes' fight with Black Mamba—The Carp and its victim—Adventures of Egg-eater snakes—Puff Adder and the hen.

THE Black Mamba is the Attila of the nation of snakes. The diabolical ingenuity of Nature is brought to the highest peak of perfection in this snake.

In form it is long, slender, and tapering, and its movements are wonderfully graceful. The average total length of a Mamba is round about twelve feet, although some are known to have exceeded this length. For speed and beauty of movement there is no other species to equal it ; the nearest rival in this respect being the Boomslang.

To see a Mamba skimming over the tops of low bushes and matted drooping grass and through the foliage of trees suggests the flight of an arrow. Makopa, this dreaded reptile is often termed ; and the natives of the north term it Muriti-wa-lesu, "the shadow of death".

The colour of the Mamba varies from dead black to varying shades of grey, light chocolate-brown, leaden, dull olive-green, and gunmetal. But the colour is deceptive when the snake is seen on the move. In

the sunshine, the body seems to scintillate with every shade of gleaming purple, shot with green and gold. In open and dry situations the Mamba is grey in colour, and, in consequence, the Boers name it the Lood-slang, which means "lead snake".

The Mamba ranges from the Transkei in the south to Tropical Africa, mostly on the wooded eastern side ; but it is by no means confined to forest areas and regions. One meets it on the highest mountain ranges, low hill slopes, the bushveld, and on broken, stony, scrub-covered ground. It also specially favours reedy marshes because of the abundance of frogs and birds which are commonly termed vinks, viz. Bishop birds, which breed in those situations in great numbers. Mambas found in these localities are invariably blacker than those inhabiting dry lands. The Green Mamba is classified as the same species, because there is no perceptible difference in the formation and number of the head-shields ; but in coloration it differs markedly, for the Green Mamba is uniform emerald green above, shading to lighter beneath ; and this colour does not vary like that of the so-called "black" variety.

The Green Mamba inhabits the forest areas and dense scrub, and is seldom met with in the open bushveld. In disposition it is timid and invariably retreats to cover when disturbed. I have never known or heard of a Green Mamba deliberately, and without provocation, attacking or chasing a man ; and, moreover, it is exceedingly difficult to see in its leafy surroundings. There have been, however, instances which came under my notice in Natal of natives being bitten

by Green Mambas when they were walking along a bush path. The snake would be lying along, or coiled on, an overhanging branch ; and the native, in passing beneath, would disturb the branch, and the snake, thinking itself in danger, struck downwards at the man's bare body. On other occasions men have been bitten who had stumbled or trod on one of them.

There is the instance of a farmer who attempted to catch one of these reptiles alive, and got fatally bitten in the act. The snake had entered a room, and, leaving the door open to enable him to retreat if necessary, the young man advanced on the snake with a butterfly net on a long pole ; but the reptile was too agile, and it made a dash for the doorway and, incidentally, bit the man in passing. It appears that the director of a Continental zoo was anxious to secure a couple of Green Mambas, and the agent in Durban had offered a high price, which tempted the young fellow to make the attempt to capture the specimens ; but he lost his life in the venture.

The temper of the Black Mamba can be set down—like that of most of us—as uncertain, and, although these fearsome snakes invariably flee when disturbed by man, they can never be relied on to do so, especially during the mating season, which is in summer-time.

The Mamba, when on the look-out for prey or an enemy, or preparatory to making an attack, raises the forepart of its body a full half its total length ; not straight up like a Cobra, but in a sloping direction. When angered, the throat, and sometimes the anterior portion of the body, is inflated, and at the same time the reptile sways ominously from side to side slowly,

gracefully, but with deadly portent. These actions denote rising anger, and the human observer would do well to make himself scarce unless he has a loaded shotgun ; and even if he has one, he is advised to shoot without an instant's delay. I was fool enough to waste time watching a Mamba one day inflating its throat and rising up in a menacing attitude, confident in being able to kill it at any moment, for I was armed with a double-barrelled shotgun charged with number six shot, which was capable of tearing the reptile to ribbons ; but down it dropped, and all I saw was a blurred greyish streak coming for me in a straight line. Yes ; oh yes, I fired one barrel and then the other, but I missed with both shots, and but for the presence of mind of my friend, who wasn't foolish enough to lose his nerve as I did, this story would not have been related.

On many occasions, when armed with a stick, I have encountered Mambas which sullenly defied me, neither moving forward nor attempting to seek cover ; but it was a standing rule with me never to unduly provoke a Mamba even when I was armed with a shotgun, and that's probably why the fellow who was then Young Fitzzy is now Old Fitzzy, with a couple of sons to inherit his name, if nothing else.

Instead of turning and racing off at top speed it is usually best to retreat from a defiant Mamba backwards or sideways, so as to keep the reptile in view all the time. Besides, the creatures of the wild know full well that a sullenly retreating foe may be dangerous. Bluff is largely employed in the lower animal world.

The Waterberg range of mountains has been the scene of many a Mamba fatality. The eighteen-year-old son of Mr. van Heerden ran into a Black Mamba basking on a Kafir path which was flanked with long grass. The distance was but a stone's throw from the homestead. The snake, instead of gliding off into cover, raised its body and struck so fearful a blow that the boy was sent sprawling to the ground. In twenty minutes he was dead.

A schoolgirl was sitting under the shade of a fig tree in the garden, reading a book, when a Black Mamba silently let its body down from a branch and bit her on the neck with fatal effect.

Another schoolgirl was spending her vacation with a friend on her parents' farm in the Zwagershoek, and the two of them were out for a walk when she felt a prick like that of a thorn on the instep, and saw a small Mamba glide away to cover. The girl soon began to grow dizzy, and half an hour later the bitten limb was numb. She steadily grew worse and died in the early hours of the morning. The nearest doctor was forty miles distant, no motor-car was available, and, as no anti-venomous serum was within reach, nothing of a curative nature could be attempted. Indeed, a doctor himself is entirely impotent in a case of snake-bite unless he has the right sort of serum with which to treat the patient.

A young farmer in Swaziland was at a buck hunt, and the natives had started beating the sides of a wooded slope, beginning at the top and spreading out in a semicircle. The young man was riding at a walking pace along a Kafir path towards the beaters,



THE NILEOTIC MONITOR LIZARD (*Varanus niloticus*) IS KNOWN IN SOUTH AFRICA AS THE "LEGUAN"
AND "IGUANA" IT IS AN IMPLACABLE ENEMY OF SNAKES, RATS, AND INSECT PESTS



THE SOUTH AFRICAN POLECAT OR STINK MUSHOOND (*Ictonyx capensis*) IS HERE SEEN IN THE ACT OF KILLING A CAPE COBRA. UNLIKE THE MUNGOOSE, IT MAKES A DETERMINED RUSH AT THE SNAKE AND RECEIVES A BLOW ON ITS THICK-SKINNED BACK WHERE THE FUR IS DENSE AND LONG

seeking for a suitable stance to obtain a good shot at any passing buck which might break cover. Down from the rocky and wooded hill came a large Black Mamba which had been scared from its lair by the cries of the natives and the barking of the dogs. The man had no time to shoot before the snake was upon him. All he saw was a blackish confusion of coils before he felt the smart of the bite on his upraised arm, which was bare to the elbow. He soon became paralysed, and died within two hours.

At another buck hunt, also in Swaziland, a fatal case of Mamba bite occurred. In this instance one of the native beaters, with a companion, was ascending a grass- and bush-covered hillside in single file when a Mamba, disturbed by some of the other beaters on the wing of the crescent, came careering down the pathway ; and, being on a higher level, towered above the native's head. Driving viciously down, it struck the man full upon the face, sending his body hurtling down the slope for several yards. The second native escaped by making a dive into the grass. The bitten man, with hoarse and terrified cries, sped down the path to a stream below ; casting his body down, he lowered his head to drink. When we arrived a few minutes later he was dead, and with his face under the water.

During the Anglo-Boer War a Boer patrol was wearily riding, single file, along a path towards a pass called Bastardsnek. The day was hot and relaxing, and the men were drooping in their saddles, when out of the grass rose a Black Mamba, which deliberately bit one of the men on the front of the thigh. Leaping

from his horse, the now wide-awake and horrified man whipped out his penknife, slit open his trousers, and, locating the fang punctures, cut out a large patch of flesh surrounding them. He bled profusely and came very near to losing his life from loss of blood ; but the venom of the Mamba did not affect him overmuch, and so he lived to tell the tale.

When the late Paul Kruger was leading a horse patrol in Magapana country some time in the early 'sixties, he ordered his men to dismount, off saddle, and await the arrival of the wagons so as to form camp for the night. While the saddles were being disposed of a Black Mamba, stated to be of great length, appeared suddenly among the men, striking one man on the bare forearm, two natives on their naked bodies, and two dogs which had made a dash at it. All this occurred within the space of a few seconds ; and the consternation was so great nobody noticed the disappearance of the snake. The shadow of death had indeed fallen upon the party, for the three bitten men and one dog died as the result of the bites.

When living a life among snakes, wild beasts, climbing precipices, sleeping alone in forests, kloofs, and under overhanging rocks where snakes, scorpions, and centipedes often come under one's blankets uninvited, folk become in time more or less hardened and do not lose nerve when suddenly confronted with unusual and startling phenomena. Perchance it is familiarity which breeds contempt, or else the realization that there is not much to fear. But I have seen

men frozen stiff and incapable of movement when suddenly confronted by some unusually startling sight.

Once I got a shock which left me weak for the rest of the day. Climbing down the side of a boulder-strewn slope of Table Mountain in Natal, I dropped from a ledge of rock on to one some six feet below. The lower rock was large, flat, and partly covered with creeper growth, and a Black Mamba was taking his afternoon sun-bath on that rock ; but his body was hidden from me, else no angel from heaven or fiend from hell would have persuaded me to make that drop, for I fell on hands, feet, and knees right upon the snake. It was apparently as startled as I was, and all I saw was a wriggling, lashing mass of coils trying to disengage themselves from the tendrils of the creeper ; while I, too, was entangled more or less in it, otherwise I should have instinctively rolled, jumped or squirmed off that rock at the peril of rolling to the foot of the steep decline. In what seemed to be a lifetime, but which probably was only a moment or two, the Mamba was gone. Then a cold and appalling fear stole over me, and I shivered, or, rather, trembled within. I have experienced that feeling before and since, but never to so great a degree. Naturally, I took it for granted the Mamba had bitten me somewhere, but I did not feel any smart other than some abrasions, which I examined one by one to see if they looked like fang punctures. Glancing at my leather leggings, I saw a wet splash, and on close scrutiny the marks of two fangs were visible, but of course they did not penetrate the leather, so no harm was done. Possibly, and very

probably, the snake had broken its fangs when it delivered the stroke.

That's nothing to a real hair-raising experience of a friend of mine with whom I often hunted in the wilds. We were out after the lifeblood of some duiker buck which had been preying upon my friend's bean and pea crops. These bucks often come out in the dead of night when decent folk are in their little beds, and the damage they do to young and tender crops is considerable.

My companion was dressed in baggy corduroys held up by big broad braces, and his feet were encased in veld-schoen. He stood behind a bush in a dry water furrow, and I was hidden near by and facing in an opposite direction, while a semicircle of Kafirs and dogs beat the bush. Hearing a startled and very forcible exclamation from my friend, I hastily wheeled round, ready to face anything which might present itself. What I saw sent an icy chill through my body. A Black Mamba, fleeing from the Kafir beaters, had glided out of the scrub, seeking desperately for shelter. The big dark gap between the leg and trouser of my mate was apparently, to its reptile brain, a sanctuary. Anyway, it slid in and up the man's bare leg, to presently emerge into daylight again at the waist. Slithering up and over his shoulder it was off and away like a streak of black lightning. Lucky indeed it was for my friend he was "froze" stiff, as he termed it. Fortunate it was, too, that he didn't wear a belt. Striding up, I shook him and anxiously asked was he bitten ; but he did not move or speak. The

shock had paralysed him as he stood, but not for long. With a sort of half sigh and sob he inflated his lungs to their fullest capacity in quite a subconscious way, and laughed hysterically. However, he took my advice after that and wore leggings when out buck-hunting.

A real race with death took place one night. A doctor at a small town, which is twenty miles from Port Elizabeth, 'phoned me one evening just when a party of us were about to sit down to dinner preparatory to going to a dance.

"That you, FitzSimons?"

"Yes, sure it is," said I.

"Well, then, listen. A farmer's daughter has been bitten in the calf of the leg by a Puff Adder. The father has 'phoned me that he is starting off in his motor-car with her."

"That's all right," I answered. "If you give her twenty c.c. of serum she will be better in the morning."

"But, man, I haven't any serum, and there's none to be had in this blinking town. It will look dreadful if the father arrives with his daughter and I have to confess I have no anti-venomous serum with which to treat her."

"Don't worry, we will see you through," I assured him.

Dropping four tubes of serum into my coat pocket, some of us bundled into a motor-car and raced for our objective, and in half an hour we were there. We had barely reached the doctor's house when the car with the girl arrived. We carried the half-unconscious child

into the residence of the doctor, and he immediately injected the contents of two bottles of serum into her ; and then she was put to bed. Next morning she was well enough to be taken home.

When the right kind of serum is used recovery from the gravest case of snake-bite takes place rapidly ; and what is so gratifying is the fact that there are no bad after-effects, which nearly always supervene when wrong serum is used ; or the patient happens to recover without treatment owing to a non-fatal dose of venom having been injected.

A Black Mamba arrived one day at the Snake Park from Zululand. It was exceptionally large, and I was, in consequence, rather interested in it. When released from the box in which it had been sent, it took sanctuary in a shrub in the Snake Park, and lay among the branches unobserved. Some friends called to see me during the course of the day, and to please them I remarked, "Come down to the Snake Garden and I will show you a Mamba which has just arrived."

"Johannes, let's have a look at the Mamba," I commanded. So he began poking about with his stick in a bush, trying to locate the snake, to enable him to hook it out and hold it up for inspection. Like a flash of dark lightning it shot out a full yard, with jaws gaping ; and lucky indeed it was that Johannes jerked his head aside, for the fangs missed his face by less than an inch. A second time it lunged, but the black boy was taking no chances, for he stepped back and the stroke fell short. But the serpent's blood was up. Dropping to the ground, it advanced upon the

attendant, who fended it off with his stick, meanwhile slowly retiring to the wall.

"Don't turn your back, Johannes ; keep it off until you can push up the ladder with your foot."

On reaching the short ladder with which he gains entry to the Snake Park over the low wall and moat, he drew it up with his foot, and, reaching down, I adjusted one end of it to the top of the wall. Up the ladder Johannes retreated backwards, while he warded off the onslaughts of the Mamba with his stick. Fortunate it was for the man the Mamba did not attack him more spiritedly, else his number would have been up. This is the only instance of Johannes having been attacked with real deadly intent by a captive Mamba. They are usually timid and seek to hide from his sight. Bite ? Yes, they will lunge whenever he comes within range ; so too will the Cobras and Puff Adders ; but he is protected by leggings, strong boots and gloves. Johannes, however, is the worry of our lives. His neck and face are bare, and he will persist in taking quite unnecessary risks. We sometimes swear at him, curse him, lecture him, and even fine him, but nevertheless, when he thinks no responsible person is around, he will sling a bunch of Boomslangs round his neck, or poke about under the aloes and bushes where a lurking Cobra could easily give him a bite in the neck or face. The fact of the matter is we have saved him so many times with serum that he imagines it to be infallible.

"Baas, hims got a strong medicine," he confided to the other natives. But all the same, if he does not watch his step more carefully, the strong medicine

might one day fail, and the Snake Park will know Johannes no more.

We used to keep a dozen large carp in the moat and pond of the Snake Park until they began to root up the lotus lilies and otherwise make a nuisance of themselves. One day, in the month of March, a Puff Adder gave birth to upwards of twenty youngsters. These little chappies, when born, are provided with a fully developed poison apparatus and the glands are already charged with venom. They need it, too, because they lead a life quite independent of the mother immediately after birth. So soon as they open their eyes upon the world they begin to quest round, and, if alarmed, the little creatures assume the defensive and bite viciously when opportunity offers. In their explorations some of them ventured on to the moat, and were forthwith gobbled up by one of the carp. Three disappeared thus, and meekly accepted their fate ; but not so the fourth. He had a decided objection to being swallowed, and promptly bit the inner coat of the fish's stomach.

"What's that carp swimming and leaping about like that for?" I asked Johannes, who was watching it in his usual impassive and detached way.

"Hims eaten little Puff Adder, and I tink hims bitten him inside."

So it proved to be. Four hours later the carp died ; and dissection revealed a big red patch on the inner wall of the fish's stomach. The venom of the Puff Adder causes haemolysis, and its usual effect on the human subject is to induce such

extensive internal bleeding that the victim dies of exhaustion.

There is a non-venomous species of snake known to the ordinary man as the Egg-eater, or Eier-vreter, and to zoologists as *Dasypeltis scabra*. It has teeth in its jaws, but they barely cut the gums because they are now a hindrance to the snake's egg-swallowing proclivities. But upwards of thirty bony processes jut down from the lower part of the backbone of the neck and cut through the gullet. These are heavily tipped with enamel, and are, in point of fact, a saw. An Egg-eater, with a head only the breadth of a clerk's forefinger, can swallow whole a hen's egg—a real full-sized White Leghorn egg. It is truly a wonderful process. Slowly the jaws of the snake envelop the egg until the reptile's skin appears as thin as the finest tissue paper. Seemingly it is impossible for the snake to get the egg into its throat unbroken ; but it does nevertheless. When safely lodged in the neck a few bony projections at the base of the gular teeth prevent the egg from slipping down too far. If this should happen the snake would choke, because it could not then bring its saw-like teeth to bear upon the shell. The bony saw is now brought into operation, and the eggshell soon collapses. The contents of the egg are then swallowed and the crumpled shell spat out.

Sometimes an Egg-eater is too ambitious and takes on a job too big even for its enormous swallowing powers.

On one occasion we happened on a nest of turkey eggs, with an Egg-eater lying dead and one of the

eggs lodged in its throat. It had succeeded in swallowing the egg, but the skin was too taut to enable the snake to bring its saw into operation.

On another occasion a smallish Egg-eater essayed to swallow a duck's egg, with fatal results to itself.

"Inyorka ! (snake) baas," excitedly ejaculated a Zulu boy whose job it was to collect the hens' eggs every day. Investigation revealed a mishap in the world of snakes. An Egg-eater, after swallowing and properly disposing of two fresh eggs, had ingested the china nest-egg with fatal results. An examination of the egg, after it had been taken from the dead snake's throat, disclosed a line of rough scratchings where the reptile's gular teeth had sawed the surface up and down. One can imagine the reptile's frantic efforts to saw the egg, and its consternation at not being able to do so, and its failure to disgorge.

Cobras also swallow eggs, but only on occasion. In these instances the eggs are swallowed entire, and the corrosive properties of the gastric juices dissolve the shell.

A Cape Cobra was once sent to us, and when it died a couple or three weeks later a post-mortem disclosed the presence of a china egg in its stomach.

Talking about snakes eating eggs reminds me of the strange way a coloured man got the sack from this material world. He was a general man-of-all-work to a family living at Humewood, which is now the fashionable seaside resort of Port Elizabeth. The lady of the house went out to collect the day's supply of fresh eggs and found a broody hen which refused to be

shooed off the nest. The lady sought to insinuate her hand under the fowl to feel if there were any eggs other than the china nest-egg. The hen objected and give her a vicious peck. She uttered the usual scream, which is the conventional thing for a woman to do under the circumstances. A layman would have shouted aloud one or more swear words ; and a parson, perchance, might well have muttered a prayer or quoted Scripture. The coloured man who held the egg-basket volunteered to explore under the hen for eggs ; but, poor fellow, instead of eggs his fingers touched a Puff Adder, which lost no time in driving its fearful fangs into the back of his hand.

When I told this story to a friend he laughed one of those nasty sceptical laughs which are so annoying ; but the yarn is true, every word of it, for the husband of the lady herself related it to me, and he was an active worker in the cause of temperance in alcoholic beverages.

Snakes love warmth, and Puff Adders are abroad both during the night and day-time. Probably in the early hours of the night this Puff Adder was silently gliding round questing for rats and mice, and, feeling the warm radiations emanating from the hen, it slid gently under and remained there. Its movements probably made the fowl think an egg was hatching.

Of course, if a snake attempted to get under a sitting hen during daylight hours, she would naturally kick up a dust if she saw it.

This self-same thing occurred with one of my own hens. Resenting the intrusion of the snake, and fearing

for the safety of her eggs, she viciously pecked the serpent, and it bit back, with fatal results to the hen. A mother-hen, which at other times is timid and easily stampeded, will often fight to the death in defence of her brood.

In Natal we used to let the fowls roam at will, and now and again a hen and her brood would fail to return home. The native boy, when scouting round for the missing poultry, invariably found the chicks huddling among the feathers and under the wings of the mother, which had died giving her life in defence of her brood from the attacks of a snake.

CHAPTER X

Held up by a Ringhals Cobra—Adventure of Reggie and his pals—Snake-catcher's exploit—How the missionary saved his eggs.

THE ordinary business man of Port Elizabeth loves to own a farm and bury his spare cash in it. One such man wisely spent all his week-ends on his farm at Kragga Kama, his means of conveyance being a Cape cart and a pair of spirited horses. He was on his way out late one Saturday afternoon, and while holding the reins he sucked a pipe-stem, mentally summing up his week's profits and losses, when suddenly he was startled out of his reverie by the horses rearing and backing the cart into the scrub which lined the roadway. After a struggle the animals were calmed down, and the cause of the bother was then apparent. A Ringhals Cobra, with hood expanded and body raised, faced the man. The road was narrow, with tangled and matted bush, mostly thorny, on either side.

It was impossible to pass the snake without driving over it ; the whip was little more than a switch, and the gent had not the nerve to attack a Cobra which could spit venom a full six feet or more when he had such a feeble weapon. Impatiently he searched the road for stones, but none was available. Realizing his impotence, he climbed back into the cart, filled his

pipe and smoked patiently, waiting for the snake to tire and vanish away into the undergrowth. But he did not know that this species of snake, when startled, usually remains on the defensive with body reared and hood expanded often as long as an hour, even more if the cause of its fear and ire is within sight. The man grew uneasy, then anxious, for the reason that he had a weakness for lingering unduly long at the club, and his wife was an active member of the local W.C.T.U. (Women's Christian Temperance Union). Her tongue was sharp, long, and unpleasantly eloquent. Right well he knew she would never believe a tale of being held up on the road for a couple of hours by a real flesh and blood snake. I know quite definitely my wife would not.

The exasperated man began to shout profane words at the snake, but it did not seem to mind. He then shied a couple of bundles of forage at it, followed by his hat, a pound tin of coffee, a packet of sugar, a tin of jam, and a lot of other things, the names of which I cannot remember. He was careful to tell me afterwards he did not throw the bottle of whisky at the snake ; he had it hidden in a secret recess in the cart where even his inquisitive wife would not think of looking. None of his missiles hit the mark, simply because the fellow was a bad thrower ; his eyes were not too bright and his brain was rather fuddled by the "ginger-beer" he had imbibed at his club prior to starting out on the journey. Besides, when he was still a boy, his mother taught him not to throw stones, and he never did ; so by nature, then, he was clumsy at the job.

Presently the harassed man was startled and amazed beyond measure, for out of the bush a little South African mongoose—which South Africans know better by the name of “Grijse Muishond” (Salt and Pepper Dog)—darted and circled rapidly round the snake. Quick as the punches of a Dempsey or a Tunney it feinted back and forth, here, there, and everywhere, while the human onlooker rubbed his spectacles, then his eyes, pinched himself, and mentally tried to count the number of “ginger-beers” he had imbibed at the club. It was no vision, but a real tragedy of the wild which was being enacted. It was not long before the wonderfully agile little animal overcame the snake, and, gripping it by the head, the mongoose proudly surveyed its surroundings for a moment, then backed out of sight with its prey, which would be devoured at leisure.

The average educated modern young men and maids are a light-hearted, devil-may-care crowd, being free from the inferiority complexes and sex hypocrisy of their forebears. A party of these jolly young folk crowded into a motor-car on a bright moonlight night. It was after a dinner, where the sparkling wine had flowed. When returning from their drive via the Cape Road at Port Elizabeth, a Puff Adder was spied in the act of crossing the road on the way to join its mate, or to lie in the cover to deal death to a passing rat. The car was stopped and its occupants poured themselves out on to the road—the men spread abroad seeking stones with which to do the poor unoffending reptile to death.

"Boys, leave it to me!" shouted Reggie, and, retrieving a walking-stick from the car, he advanced upon the reptile and deftly picked it up, for he was an habitu   of the Snake Park and had seen Johannes do the trick many a time—it seemed so simple. Besides, he had done it before, but not with such formidable snakes as Puff Adders. Reggie was of the stuff of which heroes are made, especially after the absorption of much alcoholic fluid.

"But what are you going to do with it?" the others cried, amid delightful little screams from the girls.

"Take it in to Fitzzy, of course. Let us go and rouse him out of bed. He won't mind; he's a sport, and you will see some fun. We will ask him to turn the lights on in the Snake Park and watch this beastly thing crawl round! What?" was the answer Reggie gave.

"Let's!" unanimously cried the others.

"Don't worry, chaps and girls," Reggie observed. "I will hold him safe. Speed up, old man, stamp on the gas," he admonished his friend at the wheel, and the car sped off. Imagine, if you can, a crowd of six young men and women, the latter in flimsy frocks and exposed legs, four of whom were in the back seat of the car with a squirming Puff Adder.

"It's all right, girls," soothed Reggie. "We will arrive in a tick; the beast is quite safe in my steely grip."

But it wasn't. Relaxing its body, the snake suddenly contracted, and was free. "God in heaven!" shouted Reggie, appalled. "It's got loose!"

On that instant everyone piled on to the cushions of the car, with legs drawn up as far as was possible. The driver heeded not their cries, believing it all to be part of the fun. Besides, is it not natural for the members of such a party to shout and scream and to make sundry sounds and noises? However, when the driver did realize the gravity of the position he put on extra speed. Arriving at my residence, they all leapt from the car, and with the aid of a torch the Puff Adder was located on the floor, coiled up, on the defensive, and hissing furiously.

Live snakes sometimes get into motor-cars in most unusual ways. A motorist, in attempting to run over a Cape Cobra while it was in the act of passing across a road, ran over its tail, with the result that the body of the snake whipped up and struck the windscreen, which was partly open. Here it secured a leverage, and before the man at the wheel could stop and get out, the reptile struck repeatedly at his face, but the glass intervened.

On another occasion—it was in Natal—the snake was a Black Mamba, which was thrown with great violence into the back of a car, right across the faces of the three occupants; but it was a touring car and the hood was down. After the collision the snake's body hurtled over the back of the car and on to the road.

A mechanic's assistant was bitten on the hand and came very near to death's door. It seems a Puff Adder had got its body mixed up among the bolts, bars, and other parts which go to make up the under portion of a motor-car. Something had

gone wrong, and the driver stopped at a garage to have it seen to. The young mechanic crawled under the car on his back, and was bitten before he even saw the snake.

One of our European snake-catchers is a most fearless man, except where his wife is concerned, for he lives in fear and trembling of her tongue.

"What's wrong, Smith?" I asked him one day. "You don't look very happy this morning."

"No, sir," he replied; "the wife gave me a hell of a time last night."

"I suppose you deserved it," I remarked. "You cannot go playing around with other women and always get off with it, you know."

The above is not, however, what I wanted to relate about Smith. One day he confided to me that he was worried, and that he could not sleep at night. This was, he said, because a snake had "bested" him. It appears a large black Ringhals Cobra dwelt in a hole in a sloping sandbank, and the slope was too steep for Smith to make a sudden dash and capture the reptile. This bank was, in reality, a sand dune, with bush growing along the top, and the side covered sparsely with wiry grass peculiar to the sandy seacoast. Times out of number Smith had attempted to capture that snake, but all his schemes failed. After much thought, he finally decided on a method of attack so bold that it is hardly believable. Creeping silently through the bush, he located the snake lying half-way out of its hole. He made a wide detour, eventually reaching the top of the dune,

and, peering over, saw the reptile about twenty yards down the decline. Securing a position in a straight line above, he spread out his legs and slid. Down he went at tremendous speed, dislodging the Cobra as he glided. Arriving at the bottom, he hastily scrambled to his feet and eagerly sought for the snake to make a capture before it could escape into the undergrowth. As he turned here and there, he was conscious of a weight on his jacket, and looking beneath his arm, he saw the reptile hanging from the coat, it having got a firm grip on the material with its jaws. That is the nature of this species of snake ; when it is angry and gets a good grip on its foe, it clamps its jaws and hangs on. Smith was a happy man when he arrived at the Museum the next morning with his prize, receiving 10/- in payment for it. A farmer friend was standing by, and when he learned how the snake had been caught he fervently remarked, "I thought my lot as a farmer was a hard and uncertain one, but to earn my living catching Cobras at ten bob a time . . . no, sir !"

Smith got himself badly bitten one day. He was wending his way home after a successful day, having a cotton pillow-case of live snakes slung over his shoulder, when one of the Puff Adders bit him through the bag and embedded its fangs in his flesh. He hastened to the nearest road, where a passing motorist picked him up and delivered him to me for treatment.

When a man is annoyed he invariably uses profane words ; and when he is provoked until he

sees red he reacts in a variety of ways. The Britishers punch one another's heads and bodies, mostly the former, with clenched fists. Folk of some other races jab daggers into each other, which they hold in their hands or else throw from a distance ; others, again, plug one another with bullets ; while the Zulu, when exasperated beyond endurance, gives his opponent a crack on the head with a knobkerrie. But women, really, now that I come to think of it, I don't know what they do, but I should imagine the Eves of all nations simply bite, scratch, and throw things. If you make a Ringhals Cobra angry beyond tolerance he spreads out his throat, raises his body aloft, regards you with a reproachful stare—haughty, one might term it—and spits in your eye ; lucky for you if he does not spit in both.

In the days of long ago, when manufactured goods and other civilized things had to be transported by wagon, a missionary at Mafeking conceived an ambitious scheme. He ordered a setting of eggs of some special breed of fowl. In due time the eggs arrived from Cape Town. The padre placed them in the care of a broody kafir hen, and sprinkled holy water over her, and the eggs, to ward off malign spirits. A week later, when he was breakfasting off dry bread and water—or was it grilled lamb chops, fried eggs, and steaming coffee?—he heard startled cackles from a hen in the yard. Glancing out of the window, he saw it was the one he had placed in charge of the precious eggs. Hastily striding forth, he went to investigate, and there in the nest was a Cobra in the very act of swallowing one of the eggs.

Summoning Hendricks, the Hottentot boy, he ordered him to fetch the stable fork. He waited patiently until the snake had swallowed the egg, then gently inserted the iron prongs under it. Thus the reptile was raised out of the nest and deposited on the ground. Placing the heel of his jackboot down on the reptile's head, he bent and seized the tail to prevent the snake lashing its body against him. Then Hendricks sawed the creature's head off with his pocket-knife and, turning over the body, a long slit was made and the eggs removed.

The padre anxiously and carefully inspected them and, not finding any cracks, they were replaced in the nest. In due course, healthy and robust chicks issued to forth, subsequently grow into adult hens and cocks.

CHAPTER XI

Twenty dollars a bite—Alcohol for snake-bite—Snake-bite “cure” that failed—Results of inefficient treatment for snake-bite—The famous Snake Stone—The Dassic Adder.

TWO-THIRDS of the land surface of the world is inhabited by snakes. Every infested country has its own alleged cures for their bite. Some are universal, and brandy is one of them. It is alleged that if the victim is forced to drink a quart of brandy—undiluted—it will cure him. It is a drastic remedy, and most folk would prefer to take the risk of dying.

There is a yarn in circulation which has its origin in America. It seems, after Prohibition, and before the bootleggers got right down to real work, it was exceedingly difficult, if not impossible, to obtain alcoholic drink. Imagine, if you can, the thousands of old toppers whose bodies were literally alcoholic sponges. Yes, and try to imagine their feelings after living on alcohol twenty years or more, to be suddenly deprived of it. The old-time story of burning in a lake of bubbling brimstone with the myrmidons of the arch-fiend shoving you back with pitchforks every time you got a grip on the cool edge was as nothing compared with the burning hell in those people's brains and bodies. It seems if a man got bitten by a snake, the chemist or doctor could lawfully supply him with as much brandy

as he could hold. The story goes that an enterprising man in New York City kept a couple of rattlesnakes for hire, charging twenty dollars a bite, and that his snakes were always booked up months in advance, until the Government Excise men laid their officious hands on him and destroyed his stock-in-trade.

Be that as it may, the belief in alcohol—preferably brandy and lots of it—as a cure for the bite is very widespread. The belief is: when the victim of snake venom poisoning begins to get drunk—or, as a doctor would say, “shows unmistakable signs of alcoholic poisoning”—he is on the road to recovery from the effects of the venom. Yet, strange as this may seem, it is quite true, and that is the reason why brandy has got such a high reputation as a cure. When a snake has injected a dose of venom into a man, but not enough to kill him, it exerts various poisonous and other effects on its victim, one of which is paralysis of the numerous nerve-endings in the wall of the stomach which completely paralyses that organ. The stomach is, in consequence, incapable of absorbing the alcohol, which remains in it as in a watertight bag. When the venom begins to lose its poisonous effects on the nerves, absorption of the alcohol rapidly takes place, and the victim of snake-bite is soon under the influence of the liquor he swallowed. But should a snake inject the victim with a fatal dose of venom, brandy would not save him.

When the Snake Park was started, a firm of lawyers in the Orange Free State wrote asking if I would test out a snake-bite cure. A client—a rich farmer—

they said, wanted to float a company and place this alleged cure on the markets of the world. The owner of the cure was quite positive that it was an absolutely certain antidote for snake-bite. So sure was he of this that he was quite prepared to put no less than £5,000 into the venture. Sixty-five cases in man and beast had been treated, so it was affirmed, resulting in recovery in every instance. I did not like to write back and tell the lawyers their client was a perverter of the truth, or something equally rude, but instead I made polite excuses, one of which was that should results show the alleged cure was worthless, they might think my report was prejudiced. I had already tried out some thirty-nine so-called antidotes, but not one of these had proved to be of any value—some, indeed, retarded recovery more or less seriously.

These people, however, were as persistent as the housefly on a bald man's pate, or on a fellow's nose when he wants to sleep late Sunday mornings. A letter arrived one day from the solicitors announcing that they, their client, and the latter's wife, were coming down to Port Elizabeth, also asking me to wire if I would be available for a series of experiments. I groaned inside, but what could I do? I hadn't the heart to refuse, and, as I do not like telling lies, I wired and said it would be quite convenient. In due time the party arrived. The farmer's wife waxed enthusiastic over the cure, at the same time baring her arm, which was nice and plump. She offered herself as a subject—"Let it bite me here," and she indicated her forearm.

"But, madam, I dare not," I responded.

"Why?" she demanded.

"Because the fellows who operate the laws of South Africa might hang me if you died—not that I mind overmuch, but my family would not like it."

It was, no doubt, exceptionally brave of her. She was quite prepared to be the subject, and was very sincere about it all. Seeing the look of disappointment on her face, I was sorry to have been unable to gratify her wish. The remedy was elaborately tested out, but it proved to be of no value as an antidote for snake-bite. The alleged cure was a root which was dried, pulverized, and a decoction made of it. Some was to be taken internally, and a paste made from it rubbed into the incised fang punctures.

Another South African remedy for snake-bite is a cupful of paraffin. Can you imagine a man gulping down half a pint of paraffin oil? I know of one case, but in the absence of paraffin the bitten man drank a cupful of petrol, and, lucky for him, his stomach threw it out. Yet the fellow who made him drink it claimed it had cured the patient because he did not die. A farmer wrote to me that he had cured a cow by giving it a quart bottle of paraffin. He said it stood motionless for two days, then it recovered, beginning to eat and drink. The marvel of it was the cow did not stand, or lie, immovable until resurrection day.

Another gruesome but favourite cure for snake-bite is to chase a fowl, catch it, slit open its breast and apply the palpitating live flesh to the fang

punctures. This is perhaps the most cruel of all alleged remedies.

While I was writing this article a knock came on my office door, and the secretary asked if I would see a man and his wife who wanted to consult me on an urgent matter.

"Yes, show them in," I replied.

The visitors turned out to be a man of the poor-white class, with his wife and the inevitable baby. The poor fellow was in a bad way. He was employed on the railway, working with pick and shovel and earning about 7/6 a day, on which he supported a family of five. A Night Adder had bitten him on the back of the hand, and the doctor had scarified the site of the punctures. This was a useless proceeding, because it was done three hours after the man had been bitten. The medico injected a small dose of strychnine, and also applied a powerful caustic to the victim's hand, which took off the whole of the skin of the back of the hand and wrist. The man's hand was in a shocking condition; not because of the effects of the venom, but owing entirely to the stupid treatment he received.

Another instance of criminal neglect or maltreatment of a case of snake-bite by a medical man came to our notice.

A European girl of some twenty years was bitten on the calf of the leg by a Puff Adder. A doctor was called in and he applied a ligature, also injecting permanganate of potash round the sites of the fang punctures. This treatment was given an hour after the bite had taken place, and, of course, it was useless.

The doctor in charge allowed the ligature to remain on the limb unduly long, and a month later the leg had to be amputated. This had to be done above the knee. It should most certainly be made compulsory for every medical man in snake-infested countries to have fresh anti-venomous serum available.

The "Snake Stone" is the most prized of all popular cures for snake-bite. It is best known in the Far East, where it is nothing short of blasphemy to doubt its efficacy. The "Snake Stone" is usually of the shape of an oblong bean, slightly concave on one side, being the breadth and twice the length of a man's thumbnail. Some are made of charred bone, pumice, or chalk. Those which are cherished most highly, and which are handed down in the family from one generation to another, are concretions mostly of phosphates of lime. These are sometimes found in the abdominal cavities of sheep. The stone, which is always more or less absorbent, is applied over the seat of the fang punctures, and, it is alleged, sucks out and absorbs the venom. The "Snake Stone" is then soaked in milk, which is supposed to extract the poison, again rendering it ready for use. It is almost needless to say this famous "Snake Stone" is quite useless in the treatment of snake-bite, although many millions of people believe in it. A full description of it may be found in my book, *Snakes of South Africa*.

Periodically the old myth of the existence of a Dassie Adder is revived, and controversies occur in one or more of the various newspapers and farmers' journals. It is alleged an adder of unusually large

size exists in South Africa which feeds almost exclusively on the Klip Dassie (Coney), and that its bite is certain death. The natives believe that if you look at it when its baleful eyes are upon you it is impossible to remove your gaze, and slowly but surely you are drawn to within biting distance ; else the creature advances, and, being incapable of movement, you are bitten, and death is a certainty. It seems a pity to throw the cold light of common fact on these interesting beliefs, but the so-called Dassie Adder is a lizard, named the Rock Monitor, or Leguan. It feeds on the larger insects, their larvae, snakes, small lizards, rats, the eggs and nestlings of birds, etc. It could not overpower an adult Dassie, and even if it could its teeth are not adapted for tearing the tough skin of this hardy little animal. There is no reason, however, why it should not dispose of very small Dassies. The Rock Leguan, or Monitor, attains a length of four feet at most, and is more robust in appearance than its cousin which inhabits the rivers and marshes. It is usually found in the dry, stony districts of Southern Africa. The upper parts of this large lizard are dull greyish earth colour, blended and spotted with yellow and black. When lying on a rock, basking in the sun's rays, the drab colours of the skin blend so closely with its surroundings that it may be passed at close quarters without being detected. But when seen in such situations, gliding away among the rocks and boulders, it might well be mistaken for a large Adder.

CHAPTER XII

Effects of grass fire in Natal—Snakes cause divorce—Secretary birds and Black Mamba—Snake scare on Port Elizabeth station platform—Cobra in a schoolroom.

THE alarming predicament of some natives, their wives and children, is worthy of a place in the annals of true snake stories.

Bush and grass fires are common in Natal during the winter and early spring. It was spring-time—the snakes were again abroad after their long winter sleep—when a hot wind from the north began to blow and the vegetation became unusually inflammable. The long, rank, dry grass was set alight by some natives who wished to have early spring grass for their cattle. The flames got out of hand and a long tongue of fire spread across the countryside. After a time the wind changed its direction, with the result that the head of the fire swerved over and began to run in an ever-widening belt. Soon there was a semicircle of fire which, by now, had attacked the scrublands.

A Kafir kraal was in the path of the wind-driven fire, and the headman, after much discussion with the other elders of the kraal, deemed it wise to evacuate and proceed to a safety zone on an outcrop of rocks some distance away. Here they gathered with their cattle, goats, dogs, and fowls to wait until

the fire had swept by. Presently trouble began and developed apace. The wild creatures, fleeing terror-stricken before the advancing line of flame, also sought sanctuary amid these friendly rocks. But there was consternation indeed among the natives when Mambas, both Black and Green, began gliding out of the herbage to seek cover on the same site. Puff Adders, Boomslangs, Pythons, and other species of snakes struggled desperately to out-distance the fire. Many perished, but still there was a considerable number which reached safety. Bushbucks, duikers, a troop of chattering vervet monkeys, hares, cane rats, sought the shelter of that friendly outcrop of rocks. Indeed, it eventually became a veritable Noah's Ark of wild life. Yet, strange as it may seem, although the Kafirs with their stock animals were cooped up for many hours in a comparatively small space with swarms of snakes, there were no fatalities. At such times of mutual peril the fear of a common enemy prevails, obliterating, for the time being, all lesser fears, antagonisms, and animosities.

Snakes are blamed for many misdeeds, but the most unusual is that they were, to my knowledge, the indirect cause of a divorce. A fellow with lots of energy and determination, but not overburdened with fine sensibility, started farming on a small holding. He built a cosy cottage and thatched it, first with reeds, over which he bound a substantial layer of grass. The dwelling was situated on the slope of a low hill, which was densely covered with scrub-bush, aloes, and undergrowth. The house stood

on a clearing, and the ground was terraced in front. It was a most picturesque and romantic little spot of the earth on which to dwell, and the couple were quite happy until the serpents began to interfere. It appears the surrounding bush was thickly populated with these reptiles, and they, or at least some of them, discovered that the reed layer under the thatch was a warm and inviting place in which to dwell. The young farmer was born and bred among snakes and he paid no heed to them, unless, of course, they intruded into the rooms, got in his path, or ate his chickens. But it was otherwise with his wife. She had been "imported" from Scotland, and the daily sight of snakes with heads protruding beneath the edges of the thatch whenever she sat on the stoep was far too much for her nerves. The husband repeatedly assured her the creatures would not drop down or otherwise do her any harm.

Time passed, and her fear of snakes grew. She developed insomnia; started up in her sleep at the slightest sound, naturally thinking it to be a snake. Whenever she trod on a twig a shudder shook her. The native boys would often kill snakes and bring the bodies to the house for inspection; else she would encounter them alive during her afternoon walks. The husband grew impatient. He declared there was no money available to build another house, or re-roof the present one. So slowly, but very surely, they became estranged, she growing increasingly nervy, and at times expressing her profound regret at ever having left Scotland. He, on the other hand, became morose and sulky. She

went off to stay with a friend in town for a while, making all manner of excuses to prolong her stay ; and a divorce was the sequel.

Some time later I stayed a couple of days with the chap, and, although the sight of snakes leaves me cold—no, that's not the word—unperturbed, I confess I wasn't sorry to go. The stoep hadn't a verandah, and when the sun shone on that side of the house out came the heads and portions of the bodies of a score of snakes.

"Why don't you buy a good airgun and shoot the blasted things?" I asked.

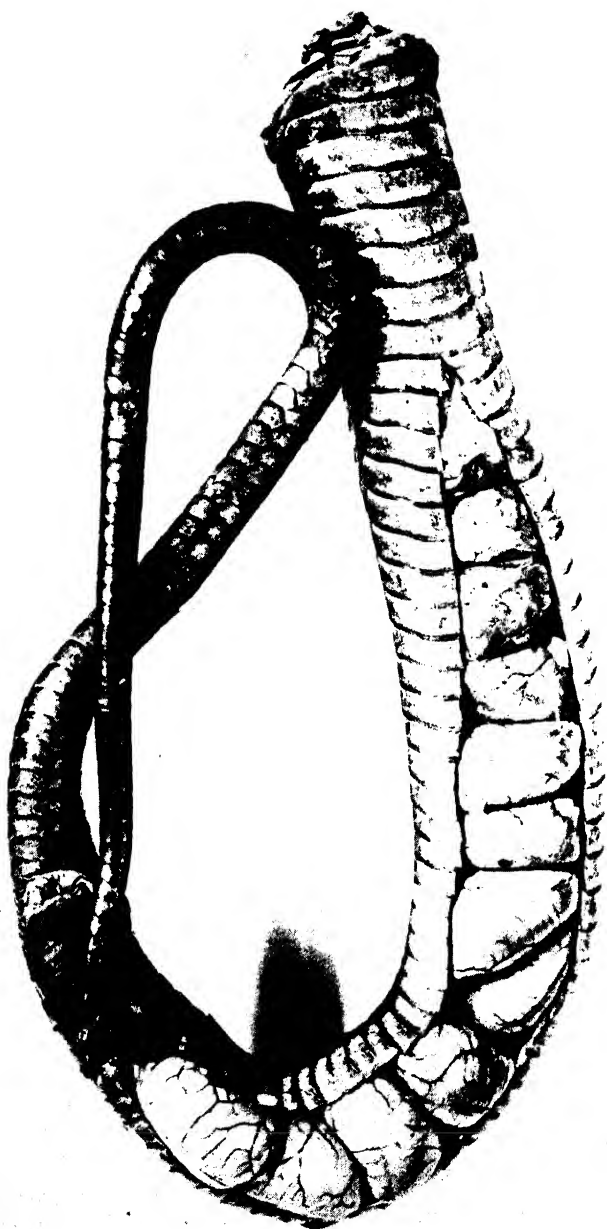
"They keep the place free of rats and mice," he said, "and, besides, they never drop down ; so why worry?"

He also argued that if he did shoot pellets into their heads, they would only withdraw into the thatch, die, and stink him out of the house.

The ground hornbill, or brom-vogel, is a voracious eater of snakes. These birds are as large as turkeys, and associate in small flocks of six to eight individuals. They seek their food on the ground, and when a small snake is encountered it is quickly pecked to death with the formidable beak of the bird. However, should the reptile be large and of the venomous species, the procedure is quite different. Three or four of the birds advance sideways towards the serpent, each with a wing outspread. The wing quills are rattled with a view to angering the snake, and when the latter strikes, the blow is deftly warded off and the bite is received on the primary feathers. Before the snake can recover its poise, the hornbills



- (1) A SPOTTED SCHAAPSTEKER AND HER EGGS
- (2) NIGHT OR DEMON ADDER (*Causus rhombeatus*) GUARDING HER EGGS
- (3) GREEN MAMBA AND HER EGGS. IT IS A COLOUR VARIETY OF THE
BLACK MAMBA OF SOUTH AFRICA



DISSECTION OF BROWN HOUSE SNAKE (*Boodon lineatus*) SHOWING EGGS IN SITU

close in swiftly and peck it to death. When the snake succeeds in withdrawing its body in time, the birds retreat and again advance as formerly, repeating the manoeuvre until the harassed creature is killed.

We had the fortune to witness a battle-royal between a pair of secretary birds and a Black Mamba. Sitting on a termite hill, my friend and I took turns with a pair of powerful binoculars to watch the fight to a finish. The snake had retreated to a small scrubby shrub of about two feet in height, but the leaves and twigs were so scanty that we had a full view of the Mamba. With head raised and body tense, this king of the world of serpents awaited the attack. Taking their stance on either side of the bush, the birds advanced sideways, thrusting forth an outspread wing like a warrior of old holding his shield in front, as depicted on tapestry. Again and yet again the birds advanced, struck a blow with the wing, retreated, and attacked again. Viciously and furiously the Mamba lunged, seeking to secure its body from attack by the powerful, curved bills. Although it had the advantage in position, we began to notice the flanking movements of one of the birds were telling heavily upon the reptile. The moment its attention was occupied in fending off the frontal attacks, the other launched one in the rearguard, delivering blows with wing, foot, or bill. So the battle waged for a full hour, when at last the two birds closed in simultaneously, and after an interval of struggling and flapping of wings the Mamba was dragged forth and soundly beaten with

hammer blows from the horny feet. Next we saw one of the victors pecking the dead serpent's head and body ; afterwards it was rent to pieces and shared.

"Hullo !" came a telephone call. "That the Museum ?"

"Yes," answered my secretary.

"FitzSimons there ?" demanded a voice in urgency.

"Sorry ; no," was the reply.

"Well, then, see here. I'm the station inspector. A goods train has just arrived and the conductor says a big and vicious snake escaped from a box in the van and has taken refuge in a crate of fruit. The conductor says he thinks it is a Black Mamba."

"Good God !" gasped my secretary. "You don't say so ? Where is it now ?"

"It's right here on the platform, and men are guarding it and the crate. They are armed with sticks. Listen. Send Johannes down at once," came the inspector's response.

The Snake Park attendant, Johannes, together with my lay assistant, sallied forth to the rescue. There, sure enough, was the crate of fruit on the platform with a couple of athletic station policemen armed with sticks keeping a close guard, while half a dozen porters, with miscellaneous weapons of defence and offence, stood fearfully and expectantly in a ring as a second line of guard. When Johannes came within earshot he was greeted with opprobrious epithets, as though he was responsible for the incident.

"A fine ruddy job this for a policeman. If that Mamba comes out I am going to beat it—sack or

no sack," a policeman declared, and to emphasize what he said, he spat on the ground.

I do honestly believe that if a Mamba had made an appearance the whole bang lot of them would have fled.

"Come on, Johannes," ordered my assistant, "get busy," and turning to the policemen he ironically exhorted them to have their handcuffs in readiness. A portion of the crate was demolished and the fruit spilled out on to the platform. The crowd held their breath, and a girl, taking advantage of the occasion, clung tenaciously to her lover, or, anyway, the man she was with, and quaveringly cooed "O-o-o-e," at the same time tremblingly confiding that she felt thrilled to the very innermost part of her desirable-looking anatomy, and that she had such a funny feeling in her solar plexus—she didn't call it that, she just laid her hand over the place.

"There it is!" gasped a porter, pointing a rigid forefinger, and everyone held their breath, except the girl, who shrieked instinctively. Another porter muttered, "My oath; I'm off!" and immediately sped down the platform like a startled hare. Then the sphinx-like Johannes, who had never before in the annals of the Snake Park been known to laugh, stood up, and with gloved hands clasping his ribs, bellowed in merriment. "Come on, you bobbies!" exclaimed my assistant. "There he is, fall on him and apply the handcuffs," pointing to a legless lizard which wriggled out in full view and timidly gazed round.

These little lizards have bodies like those of snakes,

and on close inspection the rudiments of legs will be noticed. Some species have four vestigial legs, others two, while some are entirely legless. Despite this, they all belong to the lizard family, and not one is harmful as far as poison is concerned. Nevertheless, they serve a very useful purpose in eating injurious insects. Some kinds live in trees, some on the ground, and others below surface.

"Is that 3329?" asked an excited voice on the 'phone.

"Yes, Museum here," I answered.

"Please listen, then. I am Miss —— of the —— Coloured school. We are in terrible trouble. There's a huge Yellow Cobra in the schoolroom. Please, oh please, send someone out to kill or catch it!"

Again Johannes and the lay assistant went to the rescue, but this time in my car so as to save time. Two hundred odd coloured children and a mob of inquisitive, alarmed adults were assembled on the road, on fences, here, there, and everywhere, gazing fearfully and inanely at the big schoolroom, expecting they knew not what. My assistant was rather sceptical, after his previous experience at the railway station; and besides, it wasn't likely the snake would still be wandering about in the school. The agitated lady teacher, who was on the verge of hysterics, and with good reason, too, related how she was busy with some work at her desk while the pupils were engaged with a set task on which they were concentrating with lowered heads and bent backs. One of them happened to look up and glance at the mistress,

and what he saw rendered him speechless. He dug his elbow into the ribs of the boy next to him and pointed to a Yellow Cobra which had silently twisted itself round the strands of "rimpie" of the back of the lady's chair.

"Kapel! Geel Kapel!" the youngster yelled, and instantly every boy and girl jumped to their feet. Seeing the snake was indeed a Cape Cobra, or a Geel Kapel, as it is termed, they fled for the exits, toppling over forms, desks, and inkpots in their frantic haste. Not a soul of them stayed to render first aid or anything if such were required. Meanwhile the startled teacher jumped to her feet and in the act upset the chair, flinging the Cobra upon the floor. It was perhaps fortunate that the chair was capsized, else the snake, imagining it was being attacked, would have bitten her on the back of the neck or arm. Of course, the woman lost no time in joining the children outside. She didn't faint; no school teachers do such tomfool sort of things.

The Cobra was eventually located behind a screen, captured, and deposited with others in the Snake Park. But the trouble at the school did not end with the disposal of that snake. The parents of the children asserted with united voice, and most positively, too, that the mate would appear sooner or later and take a terrible revenge. It had also been rumoured round that another Cobra had actually been seen. You know how fast rumours spread, especially if they are spicy and to the detriment of someone's character. So it was, and out of some 250 pupils, about twenty odd put in an appearance the next day. As the days

went by, a few more came to school, but the bulk of them failed to materialize. The school attendance inspector wore himself almost to death visiting the parents ; but his threats of a summons for non-attendance fell upon stony ears. My man searched every cranny, probed the holes and explored the lofts and cellars of the building ; but not a trace of another snake could be found. The school was a most dilapidated structure, and it was quite impossible to give the almost demented school principal any positive assurance that there wasn't a second Cobra lurking somewhere. The floors were old with numerous rat-holes in them, and to have made quite certain would have necessitated the removal of the whole of the flooring. This very thing the School Committee were contemplating doing when the teacher came along to see me, with a forlorn hope that perhaps I could save the situation.

"It's going to be a huge and costly business, and, meanwhile, we will have to close the school," she wailed. "Cobras don't have mates, do they?"

"Yes," I said, "every living creature has a mate if it can, but often there are not enough to go round."

"Well, then, you really think there may be a mate hiding somewhere in the building?"

"Yes," I replied, "but not necessarily so, though it is quite possible."

I went on to say snakes mate in the summer-time, but their flaming love instincts do not last long and they part again ; love-making with snakes is merely a series of episodes. Then an idea flashed into my brain.

“Are you game for an intrigue?” said I. Seeing her somewhat startled look and rising colour, I hastily proceeded to explain, and the scheme was this : I would send Johannes out again to search for the captured snake’s mate and with another Cobra in a bag. He was to let it go and recapture it ; then, of course, to display his prize to the school-children, all and sundry. The teacher fell in with the plot and it was carried out with entire success. The news flew round like wildfire ; all the scholars attended school again, and, naturally, the parents all said, “I told you so.”

CHAPTER XIII

Mamba causes stampede—Army captain's adventures with snakes—How the Boomslangs saved the hunter's lunch—Trapped at the bottom of a shaft with a Black Mamba—Python and mining men—Colonel's adventure with Cobra—Night out with a Black Mamba—Stampeded by a Mamba.

I WAS sitting on the stoep of a farmer friend's homestead exchanging snake stories for grumbles and complaints about locusts, drought, insect pests, and the shortcomings of Government, when we heard the hoarse yells of a native. By the time we found out the reason for the row the tragedy was over. A hungry Black Mamba had got into the fowl-run and seized a chick. The mother viciously attacked the snake, and, to his everlasting credit, the cock of the roost nobly joined in the fray. Their united efforts exasperated the Mamba, and spitting out the dead chicken it retaliated not only on the two courageous fowls, but it actually ran amok, biting right and left. On sighting it the native fled like a jackal when the hounds are after it, and his cries of "Imamba !" sent every native within hearing to cover. The snake was gone when we arrived with shotguns, but nine fowls lay dead ; the men who were milking the cows near by had upset the milk-buckets, and the calves were sucking their mothers dry. The herd of milkless cows, heifers, and oxen,

which were in the act of being kraaled for the night, had scattered themselves over the vegetable and flower gardens. My friend said a lot of words in the language of the Voortrekkers, but I was unable to follow, as he talked so fast. I could not have put it into print, anyway.

It is truly surprising how narrowly at times people escape snake-bite. A certain ex-army captain bought a farm in the Balfour district (Cape Province) which had been unoccupied for many years, and it had, in consequence, got over-populated with snakes. True, they kept the wild rats and mice from becoming a plague to the neighbouring farmers, but the enterprising captain had a rather uneasy and exciting time for at least a year. A snake a day was the average killed in and around the homestead ; while out on the lands the bare-legged native labourers were having a most uneasy time, and demanded and received a substantial increase in wages because of the extra risk entailed in clearing the lands. Their wives, they untruthfully declared, rained tears from their eyes all day and threw ashes upon their heads.

The captain, lying in his hammock some four feet from the ground, was peacefully dozing during a hot summer's afternoon, while the mooing cows, the quacking ducks, the clamorous fowls, and the grunting pigs were all impatiently waiting for their evening ration. Waking, he threw forth a leg preparatory to rolling out sideways and on to his feet, when up reared a large Ringhals Cobra right beneath the hammock and made a vicious

lunge at his leg. Withdrawing it with muttered exclamations of alarm, which he had learned in the mess-room, the captain sat and summed up the situation. He had no weapon; the stoep was high and narrow, and the menacing snake was on guard beneath. Not knowing anything at all about the fighting or biting capabilities of snakes, because he had only recently arrived from the snakeless country of Ireland, he naturally had very exaggerated ideas in regard to them. So there he lay fearing to vacate the hammock, while the reptile stood erect, silent and watchful. A Ringhals Cobra, when angry or alarmed, invariably rears and remains in that position for quite a long time, especially so when the cause of its agitation is in sight. In this instance the moving hammock served to keep it alert and ready for action. The captain lay as still as possible, hoping the snake would tire of its vigil and retreat, or at least lower its head, which was less than a foot distant to a most vulnerable part of his anatomy. But no, the wretched hammock would not hang still, and every time the man essayed to creep out, up reared the cobra higher than ever, striking ever and anon up at his body.

On one occasion, when he peered over the side of the hammock, a charge of venom finely sprayed hit him on the neck and cheek, but, luckily, none entered the eyes. This was an added source of terror to him, because he had heard wild yarns of the Ringhals Cobra blinding people permanently, and others collapsing and dying after the venom had entered the eyes; also that Cobras were always

ready to attack and could overtake a man running full speed. Naturally, under the circumstances he considered it to be the best policy to remain in the hammock. He declared afterwards that he had never been in such a hell of a funk before; no, not even during his four years of service in the trenches in France. However, the wife of his bosom arrived in due time from her walk with the dogs; and then there was more trouble. The fox-terrier made a dash at the snake in the bold, reckless way of those little beasts, only to recoil blinded and howling appallingly in the extremity of its pain, for the snake had spat in both its eyes. The Airedale, in a fury at the discomfiture of her chum, sprang at the snake, only to be similarly sprayed. Although temporarily blinded and suffering agonies of pain, she gripped the serpent and bit and shook the life out of it. But the snake had, meanwhile, managed to bite the dog, and she died four hours later.

Experiences, both good and bad, often come along in pairs. That very evening the captain put the artificially incubated chicks to bed in patent rat-and-snake-proof shelters. During the day a Cape Cobra had entered the open flap of the chicken box, and finding it to be nice, warm, dark, and, seemingly, a safe retreat, decided to stay. One by one the chicks were picked up and thrust inside the box, and on each occasion the captain's hand must have come within a foot or less of the lurking snake, which gave no sign of its presence. It was the wife's job next morning to let out and feed the chickens. The same performance was gone through,

only with the difference that the lady thrust her empty hand into the box. Groping round to feel if there were any left, her sensitive fingers touched the cold body of the Cobra, and, of course, woman-like, she relieved her feelings vocally. Her screams brought the husband from his repast of bacon and eggs, toast and coffee, and the poor terrified Cobra was killed.

A week of the world's time passed, and the captain was preparing for a buck hunt on the farm of a neighbour. Taking up a jackboot, he thrust a foot and leg into it, but his toes came hard up against some soft substance. Pulling out his foot, he turned the boot upside down and beat it on the floor, and out shot a scared Cobra, which was only a youngster of about twenty inches in length. That was not all. The same day, while riding at a fast trot along a narrow foot-track through the bush to secure a good shooting position in front of the beaters, a Boomslang hit him a violent swipe across the face and chest. The snake, at the time, was hanging from a branch, or else in the act of swinging across the path to an opposite branch when the man rode into it.

A snake did the hunt party a good turn that day. The lunch-baskets had been hung from the boughs of a shady tree near a pool of crystal-clear water, and word was passed round that this place would be the rendezvous of the party at lunch-time. A troop of vervet monkeys, which some people call "Aapies", had, however, been keeping the proceedings of the hunt party under observation, and so, too, had a couple of Boomslangs. When the

hunters and natives were well away, the latter came down from the top branches of the trees to examine the curious objects suspended from the branches. While doing so, the troop of monkeys from the adjacent hillside came along—also on the same errand. Swinging and leaping, the chattering apes arrived, but those in the van soon contacted the snakes, and a furious din arose. The monkeys gathered in the top branches of the tree and scolded, swore, and threatened, but the snakes lay low, one taking refuge in a lunch-basket. They kept the apes at bay and saved the lunch. Monkeys live in dread of snakes, knowing as well as, and better than, we do that most of them are armed with a very efficient weapon of defence. Can you believe it? Those hunter fellows actually shot the two snakes; but possibly they did not realize the good service they had rendered.

When sinking wells to get water, and shafts for mining purposes, a windlass rope and bucket are usually employed to descend, ascend, and to draw up the excavated material. Snakes sometimes fall accidentally into these, and when the naked natives descend they occasionally get bitten, or, at the least, considerably frightened.

A young farmer in Natal, who often accompanied me in my numerous quests into the places which had not been spoiled by man, met his death in an unusual and most appalling way. A shaft had been sunk on the farm to try to locate a gold-bearing reef. Standing with both feet in the bucket and

grasping the rope, the natives let him down. He stepped out on reaching the bottom; the bucket was hauled up and a native was on his way down when a loud command came up from my friend to the two men at the windlass to lower the bucket instantly. By now the bucket had reached the bottom, with the native in it. Shouting an order to wind up the windlass, the man seized the rope and placed a foot in the bucket for support, but the combined weight of the two men proved too great for the gear, and it either jammed or snapped—I cannot now remember which. Be that as it may, two men were most effectively trapped in a small space, where there was no escape, with a live Black Mamba.

Finding they could not render any aid, one of the two natives on the surface made off at top speed for the homestead. The father of the trapped young man arrived about an hour later with a stout rope and lantern, for the distance was long and over rough ground. Despite the warnings of the natives, who had by now assembled in some numbers, he descended armed with a stout stick. When within six feet or so of the bottom of the shaft he signalled to those above to slow down the unwinding gear. With the aid of the light from the lantern he dimly discerned his son and the native lying motionless and huddled up. Then his eyes alighted on the Mamba, whose presence he had not suspected, being quite unacquainted with the reason for the failure of the two captives responding to calls down the shaft. The snake was lying apparently dead

also. The moment the bucket reached the bottom he stepped out with one foot to get a firm stance, and rained blows upon the reptile ; but it did not move. Subsequent examination showed that it was already dead, its head and the forepart of the body being soft and pulpy. It was apparent one of the trapped men had seized the snake and frantically beaten its head against the rocky side of his prison. Imagine, if you can, in semi-darkness, a desperate man in the extremity of terror fighting for dear life down in the bowels of the earth in a space some six feet in diameter. Then, after being repeatedly bitten, to revenge himself ere he died by seizing the reptile and beating it furiously upon the rocks.

The father found both men to be dead, and when examined later by the district surgeon the young man was noticed to have had three bites on the face and one on the left hand. One bite was located on the native's back, and a second on his thigh. Can a Mamba possess sufficient venom to kill two men in so short a time, you ask ? Most certainly it can. Two drops of venom is a fatal dose for the strongest man ; and a large Black Mamba can shed in a few successive bites ten, and sometimes thirteen, drops of venom. I know, because I have frequently collected Mamba venom by making the snake bite through the rubber-covered top of a wineglass. It's quite easy. All you have to do is to grip the snake with finger and thumb by the neck ; but you have to be sure that you are holding it exactly behind the head, else it will turn and bite with one fang on the thumb or forefinger. Having got a secure hold, you grip

the tail end of the snake with the unoccupied fingers of the same hand, and then, with the other hand, the wineglass is brought up to the creature's nose and the rim rubbed against it. The snake instantly bites, the fangs drive through the stretched sheet rubber, and the pure venom is shed into the glass. Of course, like everything else, if you want to become expert you have to practise until it becomes easy. You can wear gloves, of course, but we never do that because a proper grip cannot be obtained ; and besides, it is too clumsy and doesn't give the snake a sporting chance.

On the farm where the young man and native lost their lives so tragically from snake-bite a drive had been made into the hill for the same purpose as that of the shaft, viz. to attempt to locate a gold-bearing reef, the outcrop of which had been discovered and the direction indicated by a geologist. The tunnel was seven to eight feet in height and five to six feet broad. Two mining men had come down from the Rand (Johannesburg) to inspect it with a view to floating a company, they having put up most of the money for the work already done. I was with them at the time, and each of us carried a lighted candle in either hand. When nearing a bend some hundred feet from the entrance, the combined light from our candles revealed a big Python, which, in alarm at the unusual sight of a body of men, unfolded its great coils and raised its head threateningly. Dropping their candles, the mining men fled for dear life. It was too risky to attempt a capture, and so the



HOW TO COLLECT PURE SNAKE VENOM. THE SNAKE BITES THROUGH THE COVERED TOP OF A WINEGLASS



AUTHOR SHOWING THE EARL OF CLARENDON AND FAMILY LIQUID SNAKE VENOM WHICH HAD JUST BEEN COLLECTED IN A WINEGLASS

poor creature, which thought it had discovered a safe lair, was subsequently shot.

A certain ex-army colonel, who was making heroic attempts to farm at a profit in the Addo, which is better known as Sundays River Valley, was dozing on the stoep after dinner. The atmosphere was hot and enervating to Europeans, but not to snakes, for the latter love it. The voice of his wife calling from within the house roused the sleeper, and, on attempting to rise from his long lounge chair to go and see what she wanted, he saw upon the ground what he took to be his necktie, because, before settling himself down, he had taken his tie off and opened the neck of his shirt. Naturally, he reached down and made to pick it up. Instead of being an innocent tie it proved to be a Brown Cobra, which is a variety of the Cape Cobra. Of course, the startled reptile reared up and expanded its hood, but before it could strike or even make the attempt the man had shot off his chair with the celerity of a mungoose, to a safe distance.

"Gosh !" said he to me, "I have never had such a fright in all my life."

"What, not even when shells were bursting on the roof of your dugout in Flanders ?"

"No, because we were expecting them, and it was part of our job. But to stoop, thinking you were picking up your necktie, and to find you have pinched the body of a live Cobra !" and he shivered and shrugged expressively.

Sometimes I accompanied a district inspector of telegraphs on his rounds, and in those days there were no roads like there are to-day ; and often you would not see a white man in a day's ride. To-day officials of Government travel soft and take their ease in trains, powerful motor-cars, and good hotels. Horses were our only means of locomotion, and when the country became too rough, precipitous, scrubby, or rock-strewn, we dismounted and led the animals. Natal, in those days, was alive with snakes, and Mambas were plentiful, the latter so much so that when told by a farmer or trader of somebody having died of Mamba bite we paid little heed, because these happenings were common. One day, after sundown, we arrived at a trader's store, which was our objective for the night. The man showed us to a room at the back, which had two single beds in it. After depositing our saddles and bridles in the room, we saw to the accommodation and feeding of our horses, had supper, and turned in. I blew out my candle, and the inspector took an intake of breath preparatory to shooting it at his candle-flame, when, instead, he used it up in a startled exclamation. "Holy Moses ! Look !" he cried, pointing to the pole across the top of the door, from which a curtain had once upon a time hung from rings to screen the doorway from the entrance of flies during the day, and mosquitoes by night, when the occupant of the room wished to sleep with the door open. Yes, there in the dim light of a solitary candle I saw a Black Mamba with its tail end entwined round the rod and one of the supporting brackets, and four

feet of its body hanging and partly supported by a clothes-peg.

"What the gory hades will we do?" demanded the inspector.

"Better sit still," I advised, "and watch, and if it attacks, use the bedclothes as a shield." The Mamba decided the matter for us, however, by dropping gracefully to the floor and streaming out and across the room. Seeing the commotion on the two beds, it fled beneath one of them, while we, with but a single thought, shot out of bed, threw open the door, and fled into the cold bleak wind and drizzling rain outside. Barefooted, and clad only in short singlets, and minus matches, we made off to the trader's dwelling, which was situated on an elevation some two hundred yards distant. Wet, shivering, punctured with mimosa thorns and scratched by rough, inhospitable twigs, we reached the house and knocked vigorously.

After an interval the glint of a candle was visible inside the house, and a gruff voice with a note of apprehension in it demanded, "Who the blazes are you and what do you want?" followed by some words in Kafir.

We soon allayed his fears of a native raid ; and, unlocking the door, he flung it open, when our gaze fell upon him with a double-barrelled shotgun in his hands, and his young wife holding a candle aloft. She gasped at sight of us and modestly turned her face aside. The night was spent in the trader's little lounge with a flea-inhabited carpet to lie on, and a couple of old blankets, also populated with

fleas, for covering. Next morning we proceeded in force to slay the Mamba, but it was not there. It had escaped by the door, which we had foolishly left open.

"Which is the best way to get to Umzumbi?" I asked the trader.

"There's only one way," said he. "You will have to take the path down that gorge," and he went into voluble explanation about passing a certain hill on the right, then ford a river, turn to the left, and so on and so on, while I politely answered, "Y-e-s, I understand. Quite so," etc., though neither of us could follow his explanations; but, manlike, we didn't like to admit we could not. However, we became alert enough when he warned us to be exceptionally careful, because the route was swarming with Mambas.

"Natives hardly ever venture through those kloofs and valleys," he remarked, "because of Mambas. Three natives were chased last season and bitten; and the year before two men died also of Mamba bite," and so on.

"I would advise you," he proceeded, "to dismount and lead your horses through the defiles and valleys where the tree branches spread out over the pathway. Of course, you know that Mambas lie on branches to watch for unwary birds, and if you ride underneath on horseback a Mamba might bite you on the neck, face, or arms."

Two days later my friend had the fright of his life. We were clad, as usual, in riding breeches, leather leggings, and tough shirts with sleeves rolled

to the elbows. The path turned into a tree-covered gorge, and we were riding single file, when a loud exclamation from my companion caused me to glance ahead, and there hanging from a branch, was a Black Mamba with the head and anterior part of its body in the air and swaying gently from side to side, which is a characteristic attitude when these snakes are annoyed and defiant. Possibly, and most probably, it had never seen a man on horse-back before ; and, having got accustomed to seeing the wild bucks and Kafirs turn and flee away in mortal terror, it naturally expected us to do the same. Drawing rein, we gazed spellbound at the fearsome creature.

"I say, Fitzy, what shall we do?" my friend quaveringly demanded.

"Bolt," said I, but the Mamba itself decided the affair by dropping down and advancing upon us.

The horses saw it, and, snorting with fear, wheeled round and galloped away. My horse dashed off at right angles into the forest, and before I could collect my wits a branch caught my body across the middle, sweeping me off the saddle to the ground, where I lay winded and gasping for breath. Under such circumstances no one has any recollection of the passage of time ; but probably only a few minutes passed before I recovered and remembered that a Mamba had made a dash at us. Tearing down a branch, I quickly stripped off its twigs and leaves and stood at bay ; but no Mamba appeared. Listening, I heard human cries some distance away. Answering them from time to time as I made my way in their

direction, I plunged into and through the forest growth, and finally, after rounding a thicket, was startled almost out of my senses to behold my friend suspended in the air from a branch and entwined hopelessly among a mass of creeper growth. It appears his horse, in its headlong flight, had passed beneath a mass of wait-a-bit or "wacht-en-betje" creepers, and the rider was jerked from the saddle. The more he struggled the more inextricably he became entangled. The creeper was tough and well supplied with thorns, which are like clusters of strong fish-hooks which turn outwards and inwards and everywhere.

"Don't struggle any more," I advised. "Just hold on to the branch." I forthwith climbed the tree, sat on the base of the branch, and whittled frantically with my jack-knife until the branch with the man on it collapsed and fell to the ground.

"For the Lord's sake keep still, old fellow, or the thorns will tear you to pieces !" I cried. So he lay still until I got again to work. Bit by bit the creeper had to be cut away, until at long last the victim was free and stood up, a pitiable object, with skin scratched, torn, and covered with blood.

"Yes," you remark, "Fitzy is good at telling tall yarns. Possibly ; untrue yarns and stories are all very well in books of fiction, but these are true snake stories, and readers are requested to keep that fact fertile and fresh in the storehouse of their minds.

"But the horses, did you recover them ?" Yes ; the troubles and difficulties encountered before we

succeeded are things apart, and don't fit into stories about snakes.

"The Mamba?" No ; we never saw it again. The creature, possibly, only made a feint in our direction, and when the horses bolted it slithered away to cover, well satisfied with itself.

CHAPTER XIV

Disputes and arguments—St. Vitus' Dance cured with a product from snake venoms known as "FitzSimons' Venene"—Epilepsy now treated with it by medical men—Do snakes milk cows?—Are snakes fond of milk?—Kafir umfaans and pigs—Does the Puff Adder strike backwards?—South African mongoose and Puff Adder—Does the mother Puff Adder die in the production of her young brood?

IN all snake-infested countries of the world there are popular beliefs about snakes which have no foundation of truth in them. For twenty years I have answered questions in regard to such beliefs. In articles to newspapers, and in my book, *Snakes of South Africa*, I have attempted to wipe the slate clean of such erroneous beliefs.

In consequence of these efforts, the numbers of letters asking me to settle disputes and arguments grew somewhat fewer; but when "True Snake Stories" began to appear in the *The Outspan*, I was literally snowed up with them; it is still snowing! In sheer self-defence I am writing this book dealing with some of those beliefs.

Turning over a pile of letters, and glancing casually at one, I read, "We had an argument about snakes and it nearly ended in a free fight"! Another correspondent said he had placed a bet for five pounds a side in regard to the truth or otherwise of a certain snake story. I replied, and told him he was

right, and suggested half the bet be sent as a donation to the Museum. That's three months ago, but possibly the cheque or postal order has been lost *en route*, or confiscated by Government !

A man whose income runs into upwards of £5,000 a year called on me one day with his only daughter. The left side of her face was that of an angel from heaven ; and her figure was a replica of Venus, but the other side of the face twitched most frightfully every minute or two, accompanied by contractions of the muscles of the throat and arm. She had chronic chorea (St. Vitus' Dance), and was on the way to Germany for treatment. I suggested that a certain combination of detoxicated snake venoms would probably cure her. The father was highly amused, and laughed outright at the idea ; sore and abashed, I hastily changed the subject.

Eighteen months later he called again, and I learned, meanwhile, that he had expended £5,000 in various forms of treatment and travel, but his daughter was no better.

"FitzSimons," said he, with tears in his eyes, "I am heart-broken. My daughter's life is ruined. I would give five thousand pounds to see her cured."

"Tell your doctor to write to me," I ventured timidly to suggest.

Instead of writing, the doctor came right down from Johannesburg at the father's expense. We consulted together, and he took away with him a product now known to medical men as "FitzSimons' Venene" for treating the young woman. In five months' time she was normal, and two years have gone

by without the slightest recurrence of that demoralizing affliction. But not a pound of that £5,000 has arrived ! Perchance the father left it to the Museum in his "Last Will and Testament" !

Strange and unbelievable as it may seem, this product, which consists of carefully treated and blended snake venoms, is now being used by a large number of medical men in the treatment of some forms of nervous affections, including epilepsy. But we will now return to some of the popular beliefs about snakes.

In the Press, the pubs, clubs, offices, stores, and wherever else men forgather, snakes have recently been the favourite topic of discussion and argument, judging by the shoals of letters which have been sent to me. When the argument becomes heated and personal, and a fight is imminent, some peace-loving soul invariably suggests that "Fitzy" be written to and that his answer shall bury the bone of contention. So, in order to do the Government out of that two-penny letter tax, which lies like lead on my soul, and causes such a shrinkage in the already lamentably inadequate Museum income, I decided to answer, in this book, all the questions about snakes which trouble the minds of men.

Do snakes milk cows ? is a headline which I have recently read in both South African and Overseas newspapers. It has been repeatedly related that the Cobra takes a teat in its mouth and swills the milk during the silent watches of the night, or earliest dawn. Men boldly claim that they have witnessed

this alleged nefarious act. To accomplish its purpose the Cobra would be obliged to get a grip with its body on the hind leg of its host, or rear upright, unless, of course, the cow was lying down at the time. The jaws of a Cobra are armed above and below with a considerable number of fine conical teeth like needle-points, all of which are, more or less, recurved. Then, in the front of the upper jaw there are firmly set a pair of exceedingly sharp fangs. It is unthinkable that any intelligent cow would stand or lie still while a Cobra was suckling milk from a sensitive teat enveloped round with a prickly mouth. To exert sufficient suction to withdraw milk from the udder, the snake would be obliged to suck vigorously, and that would be impossible of accomplishment without pricking and lacerating the teat.

Stories are related of farm children having a pet Cobra which has its abode in the interstices of a stone wall, or some other convenient hiding-place. The story is usually in the form of an innocent child devoid of the knowledge that Cobras are highly venomous; the little angel, of course, does not divulge the secret, but steals forth in the mornings with milk saved from its helping of porridge. The Cobra is called by name, and eagerly comes forth and drinks the milk. The parents eventually discover the fact, and the Cobra is slain.

A snake will, at times, take up its unwelcome quarters under the flooring of dwellings, or in outhouses, where we cannot conveniently get at it with a stick. The advice invariably tendered by kind and sympathetic friends is to put a saucer

of milk at some likely spot, such as the entrance to a hole, a broken ventilator, etc. The snake, it is alleged, will come out and lap up the milk. "Snakes", your informant assures you, "cannot resist milk."

These stories, and many others with variations, go the rounds like that pest, the endless chain, then somebody challenges the veracity of the story in a newspaper, and that starts a controversy which, anyway, in South Africa, usually ends in appealing to me for a final decision.

Snakes never drink milk. If they did it would solve half and more of our troubles with the inhabitants of the Snake Park and the adjacent Snake Hospital. We keep a small gang of coloured boys doing nothing else for eight months in the year but scour the country in search of snake food. If snakes drank milk, Johannes and his understudy would be relieved of the necessity of ramming piles of good beef and dead rabbits' legs, and chloroformed guinea-pigs down the capacious gullets of Pythons. Then think of the relief from that ever-present danger of a Cobra, Puff Adder, or Mamba closing its jaws like a vice over your finger and thumb when you are engaged in holding its jaws agape, while your assistant is gently ramming bits of rat and mouse down its throat.

Snakes, alas ! have a disconcerting habit of going on hunger strike after capture, and the only way to keep them alive is to resort to forcible feeding. From time to time for years I have placed dishes of milk in the Snake Park, and in the seclusion of the high-walled hospital ; but no snake ever even sips it.

True, on a hot day they will sometimes wallow in it, or wriggle through it when questing for food. Even when water is withheld our snakes still refuse to take milk ; and in its presence they actually die of hunger and thirst. It may be that occasionally a snake might be induced to drink milk if very thirsty, when water is not available ; but I have not yet succeeded in enticing any to do so. The average well-bred cow usually yields a bucket of milk at one milking. Can a man with a reasoning mind imagine it to be possible for any Cobra to contain several quarts of milk. Why, it would be swollen from tail to throat as big as the largest polony ever seen on sale in German provision shops !

No ! Snakes do not suck milk from cows ; but Kafir umfaans and pigs do. I have seen the former lie on their backs beneath a cow and squirt the milk into their open mouths. Others actually take the teat into the mouth and suck vigorously. I sat and watched this performance one day, and the Kafir youngster's stomach swelled visibly and the skin grew tight and shiny. I longed to prick it with the blade of a penknife, but forbore.

Pigs are usually regarded as being stupid, dull-witted animals. Sty-bred pigs are, but the wild pig is one of the most sagacious and cunning of animals. So, too, are tame ones which are allowed their liberty. I definitely know as a fact that, on occasion, pigs, when allowed to wander among the dairy cows, develop the habit of sucking their milk. They are well aware the act would not be approved, and might, if discovered, end in confiscation of their

liberty, or in turning their body into bacon. So this nefarious act is usually done in the night-time, or when the cows are out grazing in the veld or scrub.

Adult natives are by no means backward in coming forward with stories of Cobras and Leguans sucking the milk from cows. This often is for the purpose of diverting suspicion from themselves. Natives are exceedingly fond of milk, and will take considerable risks to get it. When a farmer pays a big strong native 10/- per month and a bucket of mealies a week for wages, he deserves to have an additional levy made on his milk.

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Through the length and breadth of South Africa it is popularly believed the Puff Adder (*Bitis arietans*) throws its body backwards when it bites ; and that, in consequence, the safest way of approach to kill or capture the reptile is to stalk it from the front or side.

The Puff Adder's fangs are half to three-quarters of an inch long and strongly recurved ; and to inflict a good bite by turning a somersault would be a most difficult feat. This formidable reptile, when about to bite, draws up its body, throwing the head well back to obtain the necessary leverage, and makes a powerful drive forward or sideways, but never backwards. However, when on the defensive it can turn with surprising agility.

The little South African mongoose, which, in appearance, is almost identical with its cousin who dwells in India, knows the Puff Adder does not strike in a backward direction. In Natal we kept one for

many years in a roomy cage five feet square. When we introduced a big fierce Puff Adder fresh from the veld, the mongoose instantly attacked it from the rear. Like the uncoiling of a clock spring, the snake faced about and began to slither slowly and sullenly towards a corner, making it impossible for the attacker to launch any more rear actions. Hissing furiously and long, the reptile was at bay with head poised, grim and alert. For a full hour, with short intervals of rest, the mongoose feinted, ran, dodged and otherwise badgered the snake, until, utterly spent with biting here, there, and everywhere, it failed on one occasion to withdraw sufficiently quickly. The mongoose, with a lightning-like movement, seized the snake's head and crushed the skull between its sharp-toothed jaws. In all these fights the Puff Adder's chief concern was to prevent attack from the rear.

Of all the questions I have been asked, the commonest is, "Do the young of the Puff Adder eat their way to daylight through the mother's sides, she dying as the result?"

There is no truth at all in this widespread belief. What actually occurs is this. Any number, from a dozen to thirty, cream-coloured eggs begin their development in the parent snake and grow to the size of pigeon eggs. These lie in two rows. When full size they begin to hatch, the embryo baby snake lying coiled and visible to the eye without dissection. When the young snakes are full-grown the contents of the egg have entirely vanished, and all that remains is a fine transparent membrane in which the youngster lies coiled. They are then born to the world one by

one in the natural way of back-boned animals. At birth the Puff Adder is six inches long, and its struggles soon rupture the membranous sac in which it came into the world. The young are entirely independent at birth, and they take not the slightest notice of their mother ; nor does she of them.

Nature is quite impartial, for she endows them with an active pair of poison fangs and two glands full to overflowing with venom. Five minutes after birth these children of the serpent can kill a rabbit, guinea-pig, or large rat with one bite, the victims dying in from one to two hours. A mouse dies almost immediately.



A PUFF ADDER (*Bitis arietans*) WHO SWALLOWED HIS WIFE. HER TAIL IS SEEN IN THE ACT OF DISAPPEARING DOWN HIS THROAT



HEAD OF A PUFF ADDER (*Bitis arietans*), WHICH IS THE TYPICAL VIPER OF SOUTH AFRICA. ITS HOLLOW POISON FANGS ARE HERE SEEN ERECT. IT POSSESSES MANY PAIRS OF DUPLICATES

CHAPTER XV

Rounding up a Black Mamba—Peculiar breeding habit of Leguan—Mamba trapped in termite heap—King of the kopje—How Black Mambas were trapped—Mamba amok in Kafir hut—Fatal result of Mamba bite—How the author nearly had his head punched.

IN the day's post there was a letter from a Civil Commissioner in Northern Rhodesia to the effect that he had shot a snake which measured eleven feet nine inches, and he was posting its pickled head to me for identification. It proved to be a typical Black Mamba, which had been the cause of a reign of terror. Its lair was a scrub and rock-strewn hillside, and from this retreat it occasionally sallied forth, chased and bit passing natives or herd boys. Eleven human beings it had accounted for over a period of three years, and in no instance did the victim live beyond one hour—most of them died in twenty minutes, owing to the fact of their being bitten on the bare body. A round-up was imperative, because the reptile was terrorizing the entire native population of that area. Fifty natives were finally persuaded to beat up the Mamba's favourite lair. Each man was provided with an old helmet, or slouch hat, and a mealie sack, which was worn on the body by the simple process of cutting a hole in the bottom through which the native thrust his head.

When a Mamba charges with intent to bite, it invariably raises its head and body slopingly ; and should the intended victim be a man, it strikes him somewhere upon the body, neck, or face.

The beaters were armed with sticks, and some carried empty petrol tins and drum-sticks. Spreading out in crescent form, they advanced into the Mamba's lair. Yelling like devils, recently loosed from hell, to relieve their pent-up feelings, they beat the bush with sticks as they slowly advanced.

Meanwhile the Commissioner and some constables, fully armoured in leggings, tough uniforms and helmets, took up suitable positions behind convenient boulders on the opposite side of the Mamba's hunting-ground. Each of these men was armed with a shotgun charged with number six shot.

Those who have not had any personal experience of a Mamba which amuses itself in its spare time chasing and killing people may, perchance, laugh at the elaborate precautions which the Commissioner took to prevent a fatality.

I have been at several such Mamba killings, and it is by no means a joke to squat behind a boulder for an hour, or it may be many hours, for the appearance of a reptile of so fearsome a nature. So sinuous and swift is it, and so wonderfully does its colour blend with its surroundings, that it is an exceedingly difficult feat to locate it. Gliding beneath the herbage this living, moving, silent death only now and again raises its head to take bearings ; and one has to be very observant and quick on the trigger to encompass the death of so wary a pest.

Mambas are fond of making their lair in disused termite mounds, which decay, leaving appreciable cavities inside which make nice warm hiding-places for snakes ; and in these they often hibernate.

A friend wanted some ant heap for a tennis court, and a wagon load was brought in from the country. The mounds were dumped down upon the site, and the work of breaking them up proceeded ; when, presently, out tumbled a Black Mamba, and of course the natives fled like startled hares ; but, it being winter-time, the snake was slow and sluggish in its movements, and was easily killed.

The female Nilotic Monitor Lizard, alias Leguan and Iguana (*Varanus niloticus*), leaves its watery haunts when the time arrives to lay its annual batch of soft-shelled eggs. It wanders off, sometimes a mile and even several miles, and, finding a suitably large occupied termite mound, it digs a deep cavity into its side and deposits from a dozen to thirty eggs therein. Scraping some of the fragments of the mound back to hide the eggs from view, it departs again for home, apparently leaving the eggs to their fate. But the mother Leguan knows that the eggs will be well cared for. The termites, which most folk know by the name of white ants, repair the damage by rebuilding the broken portion, and, incidentally, seal up the Leguan eggs. This is exactly what the mother Leguan knows beforehand ; but how she knows no man can tell. The grateful warmth of the interior of the termite mound hatches the eggs ; and the young Leguans dig their way out to the world, after

feeding and growing fat and strong on the termites, which, strange as it may seem, do not attack the eggs or the young lizards.

In this connection I had an experience which is probably unique in the annals of true snake stories. A Monitor Lizard had excavated a deep tunnel into the heart of an exceptionally big termite mound, and, after depositing its eggs therein, retired to its watery haunts, as is its habit. A Black Mamba meanwhile discovered the eggs, which are big and luscious, and easily swallowed whole because of their soft yielding skins ; and so he made a meal of most of them. Finding the hole to be warm, cosy, and a good hiding-place, he contentedly coiled up and slept happily, with possibly twenty or more Leguan's eggs in his stomach. Meanwhile, the termites lost no time in repairing the damage to their home ; like we would do if a tornado, flood, or earthquake devastated our cities. In the process of repair the termites built in the Mamba ; and on our arrival with natives to demolish the mound, because we wanted it for the floor of an outhouse, the imprisoned snake was discovered. The mound on the outside was sound and flawless before the devastating pick was driven into it, and lucky it was for that snake we had come upon the scene.

"Lucky !" you exclaim ; Why ! didn't you kill it ?"

No, we didn't. It was midsummer, and the Mamba was warm, well-fed, full of the fire of life, and possibly in a furious temper at being imprisoned for so long. It is different when you are braced up and expecting

some startling thing to happen. But to be idly watching a few naked natives demolishing a termite hill, and then to see a big Black Mamba start up out of it and shove its tongue out and in at you within a yard of your face, isn't the sort of place and time to be heroic according to the standards laid down in novels. Casting my hat at the menacing reptile, I bolted ; and so did everybody else. Naturally, the Mamba took advantage of the situation and disappeared. Subsequent examination of the hole disclosed five empty Leguan shells, indicating that five baby Leguans hatched, and, as they were not there, I concluded the Mamba, when in durance vile, had swallowed them.

A farmer at Fort Victoria, Southern Rhodesia, wrote me a despairing letter, and he went on to say in it :

There is a snake here which has beaten us up to the present. He lives in a bush-covered kopje not far from my house and he has, so far, killed five natives and more than 200 geese, fowls, goats, calves and dogs ; and we cannot get him. When any animal strays into his haunts it never returns, and now when my stock wander into the bush I cannot get a native to go in to look for them, and I have got to go myself ; and I am in a blue funk all the time lest the Mamba should come out and attack me. He is not content with destroying the lives of trespassers on his self-chosen hunting-grounds ; he now ventures forth into the open, bites, and retires to his impenetrable retreat. I have seen him twice, and he is a tremendously big fellow. We are living under the shadow

of death, and I will not be able to endure it much longer. I don't mind so much for myself, but I have three kiddies, and my wife and I are naturally in a constant state of dread and have forbidden the children to leave the vicinity of the house.

The turkeys one day wandered off towards the kopje in search of food, and the Mamba came out and killed five of them.

Two weeks ago he got my neighbour's herd boy. The "boy" was a big and powerfully built Matabele, and he lived only half an hour after being bitten, which was on the shoulder. It seems, on sighting the Mamba, he fled at full speed, but the snake overtook and bit him, then turned and made off to his lair.

Do you know how that Mamba was eventually caught and done to death? No, you would never guess, so why waste time? A good-sized cage was built, the frame being covered with ordinary netting, the same as is used for poultry-runs. In this, four domesticated turtle doves were placed, with ample food and water. The cage was hung from the branch of a tree, high enough to be out of reach of prowling wild cats, and their cousins the muishonds and mungooses. The cage was in a place out of which the Mamba had recently launched an attack on some goats. It was visited daily, and, after the fifth day, the Mamba was found inside the cage, safely trapped. It had entered by pushing between the wire mesh, and, after swallowing two doves, finding it impossible to get out again, it simply coiled up on the bottom of the cage to await the digestion of the food, not

alarmed in the least. The jubilant farmer did not waste any time. He let fly a double shot, and so ended the career of this "King of the Kopje", as it had come to be styled by the natives.

A parallel case occurred in Natal, but the Mamba did not terrorize the neighbourhood to the extent of the other. We baited a trap for it in the same way, with a couple of doves, and in due course found a Mamba imprisoned in the cage. It had only swallowed one dove, but the other lay dead on the bottom of the cage and would doubtless have been disposed of if we had not put in an appearance. As soon as we saw the Mamba, I exhorted my friend the farmer to shoot ; but he wanted to have a good look at the snake before killing it. "Shoot !" I shouted ; "shoot, you fool !" but he only laughed a fat, self-satisfied laugh, while the Mamba was busy disgorging its prey. He didn't realize the significance of the snake's act, but I did. With a final heave, out shot the mucous-covered corpse of the dove ; and on that instant the Mamba was out of the cage and off into the undergrowth. Although a double shot was sent in its direction, it made a clean get-away. No, I didn't swear ; I swallowed the words which arose in my throat, and let the other fellow sin his soul instead.

There was another Black Mamba which lived in the thatch and above the ceiling of a big rambling farmhouse of the old Dutch type. The snake, presumably, lived on rats, and, it may be, the bats also which swarmed beneath the thatched roof during the daylight hours. Anyway, we knew it was there because on occasion it was seen peeping its

head out to have a look round at the world outside ; but we never got a chance to shoot it, although a gun was always handy and ready loaded with small shot for this special purpose. Sometimes, when lying awake at night, I would hear the sound the Mamba made when slithering over the ceiling ; and once I heard a scuffle and the terrified squeal of a rat, and then silence. I loved spending week-ends at that farmhouse ; but the Mamba began to get on my nerves. We were drinking coffee on the stoep one Sunday morning, after prayers and a chapter from the Bible, discussing the Mamba, which, it seems, had been seen that same morning by the kitchen boy.

"Hendrik," said I, "we must get that Mamba. Your wife and daughters are getting very nervy, and the servants are talking about clearing out."

Hendrik pulled heavily at his pipe for a spell and then observed, "That's all very well and proper, but how is it to be done ? Burn down the house, or what ?"

"Look here, Hendrik, I've an idea, and I think it will work. Send to town to-morrow for a dozen steel rat-traps."

He wanted to know what for, but I wouldn't tell him. However, the rat-traps arrived. Meanwhile, I had prepared a cage with a few "vinks" in it. "Vink" is a general term applied to certain birds of the weaver, bishop, and widow tribes. The idea was to hang the cage by a wire from a beam beneath the roof and close enough to the ceiling for the Mamba to reach up to it, but too far for rats to get at the birds.

Seeing that it was my idea, I was naturally expected to lay the trap, and I can tell you I didn't like the job ; and the more I pondered on it, the more nervous I became. Irish people are frightfully impulsive, and they are always getting themselves into scrapes by reason of their impulsiveness, and I was no exception. But how I cursed myself for undertaking what, after all, wasn't my affair.

"What was I alarmed about?" Just this. I had to get through a trapdoor on to the ceiling with my cage and traps, and select a suitable site to set the snare for the Mamba ; and I knew the Mamba was somewhere in the thatch, perchance right over my head. Anyway, I placed the bird-cage in position and set the dozen rat-traps on the ceiling right beneath it, and retreated.

The snare was set during the morning, and we were having afternoon tea, not coffee, mark you, because the Boer's wife was British born, and liked to be up to date in the tea line. I was just in the act of sipping my cup of tea to see if it were cool enough to drink, when a Kafir girl shouted excitedly, "Missus, baas, everybody, come quick !" and we did. Right over the dining-room where I had set the traps there was a tremendous noise of bumping.

"Got him ! We've got him, Hendrik" ! I shouted excitedly.

He stared stolidly, and again I shouted, "Why, Hendrik, don't you understand the Mamba is caught, and now all we have got to do is to kill him ?"

This is what happened. Mambas are exceedingly fond of birds—to eat, I mean—and they much prefer

them to rats ; and so this disturber of the peace of that household, coming forth to investigate, slithered over the plate of a trap, which instantly sprung. As the Mamba struggled to free himself, he set off the other traps. When we flashed the light of a lantern on to him he was lying impotent, with rat-traps all over him. But he was game. He hissed viciously and fought madly to free himself so that he might take revenge ; but the brave fellow was *hors-de-combat*, and so we slew him. I hate killing anything, but this is a world where one must, at times, kill to live, or else be content to live until killed.

The worst tragedy on record, as far as Mamba bite is concerned, happened when I was little more than a youth. It occurred at a Kafir kraal on the bank of the Umgeni River, near Table Mountain, Natal, a distance of some twenty miles from Pietermaritzburg. When seeking specimens for my Museum, I had the habit of calling on the chief for a gossip, to drink Kafir beer, and to devour mealies on the cob after they had been roasted on hot embers, or boiled for many hours in a pot.

Riding up one day, I sensed something amiss. "Anything wrong?" I queried of the first native who came within speaking distance, and was informed that a terrible tragedy had taken place a fortnight back. A Natal native's hut is, by the way a circle of withes, on which a rainproof thatch of grass is bound. The doorway is small, and one has to go down on hands and knees to get in, the door itself being of woven grass or animal hide. The

family, viz. the parents and four children—three girls and a boy—had retired for the night. Each individual invariably sleeps on a woven grass mat with a pillow of wood and a blanket for covering. Before retiring for the night every stitch of clothing is removed. This, in the case of unmarried women, merely consists of a few bead ornaments, and a square or oblong of them woven into artistic designs, hanging in front of the body and suspended by a belt, also of beads sewn on animal sinews or hide. The men are nude with the exception of some strips of prepared ox, or other animal hide, hanging also from a waistband—sometimes back and front—but usually only in front. The children of both sexes do not wear anything. The family were all peacefully sleeping when a Black Mamba, which had been lurking in the warm thatch, missed its grip and fell upon one of the sleepers, who instantly sat up, wide awake, only to be immediately bitten on the body. Feeling the stroke and the smart of it, the child screamed, “Inyorka ! Inyorka ! Imamba ! Imamba !” (Snake ! Snake ! Mamba ! Mamba !)

By now every occupant of the hut was in a state of wild alarm and they all made for the door, but in the terrified scramble, and with only the feeble light of dawn gleaming through the spaces round the door, the frenzied Kafirs tumbled one over another. In the midst of them was the alarmed and angry Mamba, biting their bare bodies. It was a case of each for himself, and, in consequence, the door jammed, but eventually it was forced open and out tumbled four of the family. The inhabitants of the

whole kraal were now out, each man and boy being armed with sticks and a blanket, the latter wound round his left arm to serve as a guard. The Zulu is brave by nature and one of Nature's gentlemen, yet not one of them dared enter that dark hut where a vicious Mamba was lurking. The frantic father, however, snatched two sticks from another native and, taking a blanket as a shield, advanced to the door. The others sought to hold him back, but, flinging them off, he pointed to his body, saying the Mamba had already bitten him, and, anyway, was doomed to die. Crawling through the doorway, he presently backed out, dragging the prostrate body of one of his daughters by the foot. She was already dead. The father rose to his feet, but his legs could not support him, and, with a loud cry, he tore frantically at his throat, pitched forward over the body of his daughter, struggled spasmodically for a few moments, and died.

Meanwhile, several natives were busy with hatchets hacking an aperture in the side of the hut opposite to the door, while men, with sticks raised, stood ready to slay the snake should it attempt to make a sudden dash for liberty through the doorway. Two men, also with sticks, stood guarding the workers. When the hole was sufficiently large, one of the natives, using a long pole, turned over the blanket, seeking the missing child. Suddenly, out shot the youngster from under a blanket, none the worse for her terrifying experience. It seems, on the first alarm, she drew the blanket over her head and lay still, fearing to move, and so escaped being bitten. Of that family she

was the only one who survived, the mother being the last to die. She lingered in a comatose condition nearly five hours before constriction of the throat set in, which was followed by paralysis of the respiratory nerve centres ; the lungs then collapsed, and her spirit was driven from its mortal abode.

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It is many years since a then well-known Springbok footballer was bitten by a Mamba and died the same evening. This fine young fellow was at the time a leader in the athletic world, and his death caused a profound sensation in South Africa.

Mr. Hector McKenzie-Shaw, Government land surveyor, while in Port Elizabeth on his way to British East Africa, called on me and related the details of this sad case. He was present when the man was bitten by the Mamba, and remained with him till his death. His account of the happening is as follows : "We had been out hunting, and when returning to the wagon, which was about a hundred yards distant, my friend trod upon a large Black Mamba. The latter bit instantly on the front part of the left foot just above the boot. Without an instant's delay we tied ligatures above and below the punctures, and at once scarified the wounds and rubbed them full of permanganate of potash crystals. I then put on another ligature above the knee, and yet another at the top of the thigh, tightening them with a stick and screwing it round." Arriving at the wagon I gave him half an ordinary tumbler of brandy and placed him on a mattress, covering his

body with blankets. We also kindled a large fire by his side to keep him warm. At intervals we gave him doses of brandy. In all, he drank about a bottle of it. The snake inflicted the bite about three o'clock in the afternoon.

"For the first hour my friend was somewhat excited and talked and laughed with us. Then he calmed down and was perfectly normal, apparently, and complained of nothing except diarrhoea and an unpleasant twitching of the muscles of the mouth and tongue. Hour after hour went by, and we chatted beside the cheerful fire, planning many things for the future, never dreaming for one moment that this was the last day on earth for my friend, who seemed none the worse for the bite. A little before 9 p.m. I noticed that my patient was getting less and less talkative, and that his eyelids were becoming rather puffy. Then at 10 p.m., without warning, he desperately clutched his throat, and, springing with a bound to his feet, threw his arms out, gripped his throat again, and with a strong effort tried to speak to me, but just as he was uttering my name he collapsed on the ground, struggled spasmodically, and was dead in five minutes.

"All this came upon us with such startling suddenness that we were appalled. In laying him out, I noticed the entire left side of his body was stiff and rigid, while the right side was quite relaxed. He had evidently had a paralytic stroke just before death. On removing the clothes from the body, I noticed an irregular line of dark purple, varying in width up to two inches, running from the site of the bite up

the left side, over the shoulder and behind the ear to the base of the skull. There was no swelling or discoloration other than this livid band anywhere about the body, nor was there any haemorrhage from the mucous surfaces. Diarrhoea was more or less pronounced from the time he was bitten to his death. I mentioned this livid line running from the wound up to the skull to some medical men, but they seemed rather sceptical about it, but I can assure you it was exactly as I have stated. My friend was exceptionally strong and muscular. In fact, he was remarkable for his physical strength. He was only twenty-one years of age, and was one of the most fearless and daring of men ; but, strange to say, he had an absolute horror of snakes. Poor fellow, his first experience was his last."

The discoloration referred to by Mr. Shaw was due to the intrusion or absorption of dissolved red corpuscles into the fluid content of the larger surface lymphatics.

There are few farmers in South Africa who do not receive uninvited visits from snakes from time to time during the summer season, when these creatures roam abroad. I have sojourned at numerous homesteads, talked with many hundreds of farmers, and I cannot recall a single instance of any one of them telling that he had never killed a snake in, or in the vicinity of, his house or on his farm. I really do not know what the average South African farmer would do to break the deadly monotony of life on his farm if he didn't get a bit of excitement now and then in this connection. Why? Stories about snakes

are a never-ending topic of conversation with him, and, curious as it may seem, men do not tire of listening to or relating snake stories. True, many of them rival, or even excel, the tallest of fish yarns, or those which a Don Juan whispers to his ladylove of the moment. But snake stories, to those of us who know the most intimate ways and habits of these reptiles, fall flat when they go beyond the bounds of possibility, and most of them, alack and alas, do so. All over the snake-infested portions of the world there are men who will tell you that when a snake goes down a hole you can easily entice it out by placing a saucer of milk near by; and when folk like myself smile and say it isn't true, they regard us with pity and contempt.

I nearly got my head punched one evening for daring to contradict a farmer. It was after a snake lecture in an up-country town. In South Africa we call tiny villages "towns", which you could throw by the score into London, Paris, or New York, and never discover again, unless you advertised in a leading newspaper. We had adjourned to the hotel with the mayor and the magistrate, and, I was going to say, local parson—but the latter, of course, never indulges in intoxicating liquors. Here the farmer referred to told the hoary story of the young Puff Adders eating their way out of the sides of the mother, and that, after groaning and moaning, and rolling about in agony, she died. "I can tell you, gentlemen, I have seen it myself," he said.

Naturally the others turned to me for corroboration or otherwise, and I said politely but quietly,

and with due meekness, that the story wasn't true. The bucolic farmer wanted to know "what the ruddy blazes I meant by calling him a gory liar", and really, the rest of his language wasn't at all nice, so I will not repeat it.

CHAPTER XVI

Snake adventure in Johannesburg—District terrorized by Mamba—Rogue Mamba—Mamba in a well—Dead Mambas in drinking water—Puff Adder in Lady's hat—Boomslang and baby—Snake Park maligned.

HE stepped somewhat unsteadily from a taxi round about the time the milkman goes his rounds, when his tired and bleary eyes discerned what, to his confused senses, was a snake.

"Shay, ole man, what's that?" addressing the taxi-driver; and he pointed to something long and sinuous gliding across the street.

The taximan glanced sleepily in the direction indicated; then, wide awake, he ejaculated, "It's a snake! A blinking snake!" and he expressed his astonishment and alarm with other words which are unprintable.

By the time a weapon had been procured from the toolbox the reptile had effected a successful get-away through the open doorway of the shop of one of those industrious foreigners who provide coffee and "hot-dogs" for those of us who are nocturnal by habit.

Several early risers, or late home-comers, had, ere this, arrived, and great was the excitement. A policeman on his rounds turned a distant corner, and, catching sight of the excited crowd, blew his whistle

loud and shrilly ; then boldly bore down upon the group, believing a husband-beating wife was at work.

The unshaven faces of men, and those of women, unpowdered, bleached, greased or lipsticked, began to appear at the various windows. By now three policemen, in answer to their colleague's SOS, had arrived and demanded explanation.

"I saw a snake a yard long go through that doorway," the taximan shakily declared.

"Garn, you've been drinking ! You mean to tell me you actually saw a live snake here, right in the centre of Johannesburg ?" the sergeant asked scornfully.

"True as you are standing there I did," the man stoutly declared.

He roved his eyes over the people assembled to find the "fare" to corroborate his story. But the man concerned had wisely beat it. He had sense enough to realize that in his present bemused mental condition nobody would believe him because, somehow, alcohol and snakes seem to have a psychological connection. Besides, he was one of Johannesburg's upper set, and his wife was hibernating for the good of her health in Port Elizabeth. Newspaper men have a weakness for using Reuter rather liberally, and the story, with a well-known man's name attached, would furnish most interesting and embarrassing "copy".

"The fellow's gone and hasn't paid my fare !" ejaculated the indignant taximan ; and he was about to make off in pursuit, but the sergeant's hand fell heavily on the collar of his coat.

"Nah then, not so fast," he snarled; "let's see this thing through. Now, what's this yarn about a snake? You say you saw it go through that doorway. Well, then, come along and find it. Snake, indeed!" he sneered. "It's some crook's game it is, and don't try any more get-away stunts—see"; and he glared at the taximan, at the same time pushing out his lower jaw and displaying a set of tobacco-stained teeth.

By now the news had spread to the inmates of the house that a live snake had sought sanctuary there.

Like rats fleeing from a burning building, out came the hot-dog and fried-fish man, followed by his portly wife and numerous progeny. But that wasn't all. The house was of three floors, and its numerous small rooms were occupied by lodgers of both sexes. They, too, fled for safety to the streets, some clad in pyjama suits, others in obsolete nightdresses, red flannel petticoats, and articles of attire tied or held to their persons.

"By gosh!" ejaculated a youth. "Don'tcher know! Haven't you heard! Why, a Black Mamba ten feet long went into that house."

"What's a Mamba?" innocently queried the inquisitive town-dweller.

"Why, man alive! a Mamba's a poisonous snake, and if it bit you you'd be a goner in five minutes."

A small crowd began to form round the youth, who, for the first time in his short life, felt he really knew a thing or two which others didn't. So, in a loud voice that everybody could hear, he repeated his

former declaration that a Mamba was a venomous snake, and that if it bit anyone he would fall down dead right away, and that the snake had fled into the hot-dog man's shop. Warming up, he declared a Mamba can travel faster than a racehorse.

A black cat, with a tail like a bottle-brush, suddenly darted from the open doorway and crouchingly fled.

"Mamba !" yelled the youth, and he sped away, followed by a panic-stricken crowd. In the uncertain light of the early morning a black cat with tail extended, and going at full trot, might easily be mistaken for a snake.

It was sunrise before the police ventured to explore the store. Four stalwarts, each armed with a stick, gingerly entered the doorway and began poking about among the miscellaneous assortment of goods which the place contained. By now, of course, a real good crowd had gathered outside, much to the annoyance of motorists and tramwaymen.

Everybody was in possession of the alleged facts. The taximan had made it quite clear that a big black snake had fled across the road and entered the open doorway of Greasy Jim's store. Some of the original crowd went off reluctantly to their various places of employment ; but others gathered and were eagerly and excitedly informed that the police were hunting down "a big live snake". Presently the crowd got a real thrill, and the forefront of it backed hastily away from the open door of the shop, from which a noisy din could now be heard. The police had sighted a snake, and in wild excitement they slashed and poked about with sticks. Boxes of merchandise

were upset, bottles of sweets fell with a smash to the floor ; dishes and small tables crashed. Then out fled a scared rat and his wife ; they made a desperate plunge for safety through the crowd. Men shouted and swore ; women and girls shrieked. One wonders why the Eves of our race always scream and men shout and swear when under the spell of some sudden excitement of an unpleasant and dangerous nature. Is it supposed to be the conventional thing to do ? Or is it biological ?

But the real thrill was yet to come. Terrorized by the commotion, the hunted snake made a desperate bid to reach its former sanctuary across the road, from which, driven by hunger and the smell of mice, it had bravely ventured. Wriggling and partly gliding, it fled out into the street, but was appalled to see a surging crowd of hated and dreaded human-folk fleeing in all directions. Uncertain what to do under these alarming circumstances, it did what all its tribe does—hissed threateningly.

A blow, and then several others delivered in rapid succession, terminated its life in the mortal body. Proudly those policemen who did the heroic deed surveyed the cowering multitude. The pickled body of the reptile was sent to me for identification. It proved to be an adult Brown House Snake (*Boodon lineatus*), two feet five inches in length.

This species of snake is non-venomous and feeds almost exclusively on mice and rats, and, like the mossie or Cape sparrow, it prefers the abodes of men to the lonely veld.

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From Potgieters Rust in the Northern Transvaal there came a plaintive cry for help from a farmer who lived in the bush-veld. He wrote as follows :

My friends and I are desperate. Nearly every summer season someone gets bitten and dies of Mamba bite. Death, so far, has followed every case of a bite by this dreadful snake. We have used every kind of Kafir and farmer remedy, but with no success ; also cures such as those in the form of roots, herbs, decoctions from bark, the pounded body of a dried lizard of a certain species, paraffin, alcohol, Stockholm tar.

My correspondent went on to say that a Black Mamba, which the natives up there call a Makopa, had bitten a youth of twenty-two years of age. He was a fine, promising young farmer's assistant. Shortly after the bite he sank into a deep coma, partly rallying, only to again become unconscious. This went on for ten hours. Breathing became shallow and yet shallower, until, with gasps and terrible struggles for breath, he died. A curious phenomenon is that, after breathing ceases, the heart still goes on beating, and only slows down and stops entirely after a considerable interval. This would indicate an injection of lobelin to keep the lungs going until anti-venomous serum can be administered. The serum, to have a life-saving effect in these cases, must be injected copiously.

Another case is related, also of a young European farm-hand. He occupied a thatched hut near the homestead ; and one morning, after rising from his bed, he removed his nightshirt and stood up naked.

A Black Mamba, which had been lurking in the thatch of the low roof, let down part of its body and bit the man on the bare back. Dropping upon his knees, he made for the loaded shotgun standing in a corner, and with it he killed the reptile. Breaking the reservoir of the lamp, he drank a couple of mouthfuls of paraffin, and hurried off to the cattle kraal, milked a cow, and drank freely of the warm milk. Staggering back, he roused his employer and told him what had occurred. The venom was already beginning to cause its well-known symptoms of paralysis and coma. But nothing further could be done, and the victim passed out sixty minutes or so after the infliction of the bite.

A third Mamba became a rogue and bit domestic animals at sight. The goats first fell victims owing to their habits of wandering far afield in search of food. Then the sheep began to succumb, most of the victims being bitten on the nose or ears. For a long time the reptile confined its attentions to small stock, including poultry, although cattle wandered about the bush-veld, which was its haunt. Possibly one day a beast irritated the snake when it was dozing peacefully on a branch. Or, perchance, it was lying immovable, waiting for a wild bird to approach within striking distance when a lumbering cow came along. However, when the cattle were periodically rounded up and counted one or two would be reported missing. After diligent search the decomposing bodies of the beasts would be found—victims of this Mamba.

A drought was prevailing in the district and no

water was available. The Mamba, in its desperate need, came to the well some little distance from the homestead to try to obtain a drink, but, instead, it fell into the water, which was some fifty feet below ground. The native house boy subsequently went to draw water from the well, and, singing in the light-hearted way of natives, he wound up the windlass ; but when the bucket came in sight, right in front of his face there was an angry Black Mamba clinging desperately to it. His song was cut very short, and shouting "Makopa ! Makopa !" he fled at top speed for the sanctuary of the kitchen. Meantime the windlass had unwound itself, and the snake was again at the bottom of the well. To get it out was a problem. Eventually it was decided to shoot it ; and a venturesome young farmer volunteered to go down the well sufficiently far to locate the snake and do the deed. A slipknot was made in the rope ; in this he placed his right foot, and two strong men carefully controlled the windlass until, hearing his cry to stop, they ceased lowering him. Presently there was a loud report, and they then hauled the young fellow up. The serpent's body was pulled out after many hours of fishing with improvised grappling-irons.

A rather nauseating thing occurred some years ago. A farmer obtained his drinking water from a large cistern into which the rainwater drained from the roof of one of the outhouses. Usually these underground tanks have strong and well-fitting lids ; but South African farmers are not given to keeping their possessions in up-to-date repair. Perchance it is the enervating climate, or the daily

example of the indolent native. Anyway, the water was obtained from the tank by means of a hand pump. I was staying at that farmhouse when the hostess complained that the water did not smell any too sweet. I suggested the tank be pumped dry and given a real good cleaning. Seeing that this had never been done, and the tank was ten years old, the host decided to carry out my suggestion.

Kafirs took turns with the pump until, at long last, the big underground cistern was devoid of water. The following day a gang of natives baled out the residue of water and debris. When the sediment dried in the hot midsummer sun, I carefully inspected it and found the bones of toads, lizards, and the remains of five Mambas. One can imagine the feelings of the household when they realized that the water they had been drinking and using for culinary purposes was mixed with the decomposing remains of the most deadly of Africa's snakes.

Talking of underground tanks reminds me of the story which a British farmer in South Africa told to me. The English are a race who do not feel clean or comfortable unless they have a bath almost every day, if not every day. This man was no exception, so, being able to afford it, he converted the existing underground tank into a miniature swimming bath, with cement steps leading down into it. Here his family and he took their daily bath. During one hot summer season his people had a number of young men and maids as guests. The day after their arrival the host proposed a swim. Forthwith they all disappeared, to return each clad in a bathing costume.

"Let me lead the way," said the host, and down he plunged from the steps into the bath.

"Come along, fellows and girls !" he shouted. But they hesitated, not being used to the semi-darkness of the tank ; and it was well they were not too hasty, for, with a loud threatening hiss, a Black Mamba made a lunge at the man in the water, but, having no purchase, its body slid back on the water's surface, and its gaping jaws fell short of the man's bare shoulder.

Naturally he lost no time in making off, and so, too, did the rest of the gay party. Fortunate indeed it was they had not followed their host's example and plunged into the water, because, without a doubt, three or four would have been fatally bitten. It is on record that a pack of hunting dogs, mostly Great Danes, closed in on a Black Mamba, and before they succeeded in tearing it to pieces it inflicted bites on six of them, and every bitten dog died.

But tourists need have no fear of ever encountering Black Mambas. It is the settler in Mamba country who comes up against them ; and the hunter ; and natives who live away from civilized centres. There are literally tens of thousands of people in South Africa who have never seen a live snake, except those in the Port Elizabeth Snake Park.

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The following are a few interesting incidents recorded in my diary in connection with snakes :

A lady well known in the best society of Graff Reinet was taking a stroll one midsummer evening

while it was yet dusk, but not too dark to see fairly clearly. The footpath was mostly covered with short grass, and lying in it was a Geel Slang or Cape Cobra. The lady failed to see the snake until she actually trod upon it, and, naturally, the reptile retaliated by biting her foot above the shoe. The venom of the Cobra is a powerful nerve poison which causes death in from half an hour to six hours, according to the quantity injected and the susceptibility of the victim, which varies in different individuals. A doctor was summoned, and fortunately he had a supply of anti-venomous serum. He was determined not to leave anything to chance, and injected a double dose, the second one intra-venously. The patient rallied and made a complete recovery, with no ill after-effects.

It was only a few weeks after this startling occurrence that a man left his cycle against a fence on the pavement outside his residence in the same town early one evening. On returning he saw what appeared to be a yellow strap round the handle-bars. On closer inspection, the supposed strap turned out to be a Yellow Cobra, which instantly spread its hood and faced him, ready for a fight. A retreat was made for a weapon with which to kill the inquisitive reptile.

A lady resident of Walmer, which is adjacent to Port Elizabeth, had rather a startling experience. She was busying herself laying the table for supper, and was in the very act of lifting the cruet-stand from the sideboard, when she saw the yellow and black gleam of a Puff Adder's body coiled up behind it, with head

drawn back ready to strike. She neither screamed nor collapsed.

"Mary," she called out, "go into the pantry and fetch me an empty oatmeal tin. You will find one on the top shelf."

While Mary went for the tin she kept the snake under observation; and between them these two bold women managed to hustle the hissing Puff Adder into it. Clapping on the lid, a few air holes were punched in it, and they brought the snake to me next morning to put in the Snake Park.

"But how on earth did you get so vicious a snake into a tin?" I asked. "We just laid the tin on its side, and after a lot of coaxing the snake crawled in," they replied.

A lady of my acquaintance in Natal had about as hair-raising an experience with a Puff Adder as one could imagine. In those days women wore bonnets, or, anyway, hats with a lot of soft lining, and this particular hat was for summer wear. It had been put away in a cupboard or some such hiding-place in her bedroom, and a Puff Adder, seeking a substantial and suitable bed in which to hibernate, found the big roomy hat, coiled up in it with a prayer of thankfulness, and went off to sleep with no intention of waking until spring-time. One day the lady and a couple of friends were sitting on the bed, examining and discussing dresses and dress materials, and the conversation turned to hats.

"I have a lovely hat which will suit that frock beautifully," she said, and impulsively sought the hat previously mentioned. The lady brought it

proudly out, and standing before the mirror clapped it on her head. No, she wasn't bitten by the snake, which was too somnolent to realize what had disturbed its dreams, but it fell out of the *crown of the hat, on to the lady's head, and then to the floor.*

A, then, small son of mine gave me quite a shock one fine day. I had been in the habit of taking him and his brother for rambles into the country. Naturally, when we happened on a live snake I captured and brought the creature home, using a bag to carry it in. We were living at Walmer at the time, and on my arrival home from the Museum I was greeted with a shout of, "Hullo, Daddy, I've got something for you," and then I realized what was meant by the maxim, "a little knowledge is a dangerous thing". Unfastening a safety-pin which closed the entry to a trouser pocket, the youngster dived in his hand, fumbled for a minute or so, and triumphantly brought forth a squirming young Cobra, which he held securely by the throat and with its tail gripped between his little finger and thumb. With a rapid jerk I plucked it away; but I hadn't the heart to scold the little chap, who, after all, had hoped to give me a "pleasant surprise". Instead we made a pact.

"Don't tell Mother a word about it, see?" and we pricked each other's skin with a pin and mingled our blood; and a blood brotherhood we have maintained in all things since. The little fellow had, in all innocence, mistaken a Cobra for a harmless Brown House Snake.

There's never a month goes by in the summer season without the arrival by post of a mangled

snake, or one brought by some excited individual with a story of how it was slaughtered in the house, on the stoep, or somewhere around ; and the hair-breadth escape someone had of being bitten and hustled prematurely into the spirit world. Invariably these snakes are mistaken for Cape Cobras, whereas they are harmless Brown House Snakes questing for mice.

We are told that circumstantial evidence hangs numbers of men who are entirely innocent of the crime with which they are charged. There was an instance in connection with a snake which might easily have sent me to "quod", or caused all the human-folk I know to look askance at me. A recently married lady came to reside with her husband in a beautiful residence not far from our Snake Park, and she had a darling little baby. I hasten to add that when I used the word "recently" married, I mean over a year. It was a Truby King baby, and every day, of course, the pram was put out with the child in it under a low-spreading branch of an oak tree. I was having morning tea with the mother on the Museum Café stoep, and, being Irish, I said something or other which roused her sense of dignity, and she pretended to be angry ; but she was not really so. Anyway, they say, "when an Irishman opens his mouth he puts his foot into it". My wife says that's what I am always doing ; so it must be so.

"Look here," I said chaffingly, "you cannot afford to quarrel with me."

"Why?" she demanded.

"Because I could retaliate."

"What would you do?"

"I would just chuck a Boomslang (tree snake) or two over the stone wall and into your Garden of Eden. That's what I would do."

"You wouldn't dare," she breathed.

"Dare," I replied. "I would dare any damned thing."

A week later a telephone in the general office rang, and a lady's voice demanded me.

"But, madam, what's your business?" asked the secretary who answered the call.

"Never mind what my business is," she rudely replied. "I want to speak to the Director," and so the call was switched through.

"Is that Mr. FitzSimons?"

"Yes," I replied.

"There's a big snake in my garden. It nearly bit my baby," she cried, and then sobbed, and the 'phone was rung off.

"Come on, Johannes. Bring Christian, David, and Solomon, and two butterfly nets." The snake was a fine big Boomslang, and there he lay upon the oak branch already referred to. We closed in on him fore and aft and at the flanks, and soon he was struggling in one of the nets.

Then I heard the story. The baby was peacefully sleeping in his pram under the oak branch, and, of course, the mother came on to the stoep every ten minutes or so to see no danger threatened the child, as is the way with all mothers of first-born babies. Glancing across, as usual, she was horrified to see



A NON-VENOMOUS BROWN HOUSE SNAKE (*Boodon lineatus*) CONSTRICTING A BACK-FANGED SCHAAPSTEKER PREPARATORY TO MAKING A MEAL OF IT.



BROWN HOUSE SNAKES (*Boodon lineatus*) IN THE ACT OF HATCHING FROM EGGS. SOME SPECIES OF SNAKES LAY EGGS; OTHERS PRODUCE YOUNG. THE EGGSHELL IS SOFT, TOUGH, AND LEATHERY

a snake hanging from the oak branch right over the sleeping child's face and within six inches of it. The reptile had no intention of doing the baby any harm. It was merely curious, and wanted to know what the funny little thing was in the pram. A mother knows no fear when danger threatens her offspring ; and with a sobbing cry she made a dash for the pram, took the child in her arms and fled with it into the house, heeding not the snake, which might have bitten her on the face or arm. It wasn't our Boomslang, and, needless to say, I did not throw it over the wall ; but I fear, even to this day, the lady has a lingering suspicion that I was in some way responsible.

Baakens River Valley runs from the sea and cuts inland through the town, and from this valley snakes often wander to the residential parts in quest of mates or food. Of course, whenever a snake is seen anywhere within a mile of our Snake Park, we get the blame for it.

"Yes, it's from that blasted Snake Park !" violently declared one man who killed a harmless House Snake in his garden.

Another said unpleasant things over the 'phone, and we invited him to bring the snake along. It turned out to be a big red earthworm.

CHAPTER XVII

Ringhals and crab—Snakes and lizards—Butcher bird and his victim—Green Mamba exploits—Eating snake-bitten sheep—“Never Die” bites off heads of live venomous snakes—How bank accountant was found out—Horsehair ropes.

SNAKES have multitudes of enemies other than man, which prey upon them, but they sometimes come to a violent end in unusual ways. Wandering along the bank of Baakens River at Port Elizabeth, I saw a large land crab at the mouth of its hole in the river bank, and in the crab's claws was the head of quite a good-sized Ringhals Cobra. The snake had, apparently, poked its head into the hole in quest of a rat ; or else it was inspecting the entrance to ascertain if it were safe to hibernate therein, when the crab thrust out a claw and gripped it. The disturbed and broken appearance of the surrounding soil bore ample testimony to the prolonged struggle which had occurred before the snake was finally overcome.

On another occasion I was wandering alongside a stone wall trying to catch lizards with a net on the end of a pole, when I happened to disturb a Cape Cobra (Geel Slang). It reared in the usual way and faced me, and before I could decide to attempt a capture or leave it in peace, I saw a big lizard known as a Klip Salamander, sometimes

called a Kochelmander, make a wonderful leap from the wall and seize the head of the Cobra in its vice-like jaws. To and fro and back and forth the two creatures struggled, the snake trying desperately to free its head from the grip of the lizard, while I leaned against the wall and watched, for, truth to tell, I love a good and fair fight. A full hour the battle waged before the snake began seriously to weaken ; but it still struggled gamely, and I took out my lunch and sat on the wall and ate it, determined to see the end of that apparently unequal fight. Unequal? Yes, of course it was. A cheeky little lizard a foot long tackling a five-foot Cobra. Eventually the snake collapsed, turned over and over countless times, and lay still in death.

Why the lizard should attack so large a snake I know not, because it was naturally incapable of swallowing it ; and these lizards have no chewing or tearing teeth. Of course, snakes prey largely on lizards of various species, and in this instance the Kochelmander, perchance, imagined it was about to be attacked and took the initiative. These lizards, and also the little fat-tailed Geko, are erroneously believed to be venomous, but in reality they are not. None of the South African lizard family is venomous ; and they are, without exception, of very great economic value, because they live almost entirely on insect life, mostly of a kind injurious in many ways to us.

Talking about lizards reminds me of the untimely death of a Puff Adder in the Snake Park. There is a rock-frequenting lizard which is quite common in

some parts of the Orange Free State, and it is known to zoologists as *Zonurus giganteus*; but we call it the Thorny Devil, because its tail is covered with hard, horny spikes and its body also, to a lesser degree. It is stout and robust and attains a length of a foot.

"Some Thorny Devils arrived this morning," announced the lay assistant, who is in charge of our live stock department.

"Put them in the Snake Park," said I.

"But," objected he, "won't the snakes eat them?"

I laughed at the very idea of a snake tackling one of these formidable lizards. As well ask a man to pick up a porcupine with his bare hands, or bite the back of a hedgehog.

But, sure enough, a Puff Adder of adult size seized a Thorny Devil by the head. Truly, snakes are perverse creatures, and, like our womenfolk, you never know what they are going to do until you have lived with them half a lifetime, and even then you are not quite sure. This adventure of the Puff Adder was a new experience both to him and to the lizard, and the latter's slow-moving brain failed to comprehend or cope with it. Thinking he had an easy and inoffensive lunch all ready to swallow without undue expenditure of energy or venom, the snake began to suck in his intended lunch's head. Then the latter, which hitherto had not moved, quick as a flash of light turned its body sideways and belaboured the snake so furiously and effectively with its thorny tail that the Puff Adder hastily spat out the lizard's head and sullenly retreated.

Mixing these lizards with snakes wasn't a success. Every now and again a snake would have a bite at one of them, and retire sulkily with a bleeding mouth ; or else it would be belaboured so viciously and so heavily that it subsequently died of its wounds.

But on one occasion even the stolid Johannes laughed heartily. A hungry Mole Snake stalked and constricted a Thorny Devil, throwing three coils round it. For a spell it embraced the lizard tighter and yet tighter, then, relaxing, it beat a hasty retreat, dropped into the moat and swam furiously, startled beyond compare.

The Thorny Devils began to take the aggressive and ate the smaller snakes. Then Johannes complained.

"Baas, hims worry me," indicating the lizards.

"Why, what's wrong, anyway, Johannes?"

Then he explained, but his command of the English and Afrikaans tongues is not great. It seemed the lizards were in the habit of standing with head erect and immovable for hours, and then, without any apparent cause, one or more would scuttle away, plunge into the moat, swim frantically for a few seconds, and then sink like a stone to the bottom and remain there until it died ; and poor old Johannes was always coming to the rescue, which necessitated his keeping wide awake, which is foreign to his nature.

The Rock Monitor, or Mountain Leguan, is one of the creatures designed by Nature to keep Thorny Devils in check. His big jaws are hard and horny, and the Devils' spikes don't embarrass

him at all. He just nips one up by the waist, whacks it upon a rock until it is dead, and swallows it head first ; and licks his lips with a forked tongue.

I was sitting on my stoep, not watching the wool grow on the sheep like the easy-going, but now extinct, type of South African farmer. But I was equally preoccupied. A Jack Hanger, which is also known as a butcher bird and Johnny Hangman, and, to ornithologists, as a fiskal shrike, had made my lawn his principal hunting-ground. It is true the bird nipped the head off my mountain roller canary which used to warble me to sleep ; but that was entirely my fault, because of my carelessness or meanness is not providing a jacky-proof wire cover to the bird's cage, and, despite my wife's constant nagging, I refused to have my friend done to death. He would sit upon a telephone wire, immovable, and ever and anon plane down upon the lawn, pull out a fat cutworm, fly to his perch and swallow it with gusto. Yes, I know cutworms have a right to live and enjoy themselves ; but I planted that lawn, and those worms were robbing me of the fruits of my industry. One day Jack died tragically. I saw him alight as usual upon the lawn, pull out what I took to be a big earthworm, with which he struggled for a few moments, and then he flew with the wriggling prey to his perch on the telephone wire. Here he struggled for a spell, fluttered frantically and lurched forward, hanging head downwards, but still retaining his grip upon the prey, which I now could see was a young snake, that had bitten the bird and coiled round his

neck. In due time we secured a long step-ladder, and closer investigation revealed the prey to be a small Cobra, and the bird, even in death, retained a firm hold upon both his perch and prey.

There was another instance of a Jack Hangman falling prey to a snake. These birds are territorial, which means a pair take, either by force or peacefully, a farm or given area of land, which will provide a sufficiency of insect life for their needs and that of their numerous children ; and here they stay until death, or a more virile pair of Jack Hangers dispossess them of the land.

On this farm of theirs, which in reality was about an acre of my land, I made a snake enclosure and turned loose every live snake I could secure by fair means or foul. This was on my estate at "Gorahwood", in Natal. The jackies resented this intrusion most bitterly, and, when not hunting for insect food, they would sit on a shrub in the snake enclosure and scold the snakes by the hour. While thus employed, the head and body of a Green Mamba shot out from among the leaves of a shrub, seized one of the birds, which fluttered feebly for a few seconds and then hung limp—dead. This same Mamba killed a fowl. It was a prize rooster, and he developed the habit, when I was not looking, of flying on to the wall of the snake enclosure and dropping down inside to eat the grain which I had provided for the mice on which some of the snakes fed. I saw the old rascal strutting round, and, seeing me, he made haste to clear off, knowing how I frowned upon his visits to the snakes. Passing under the shrub where

the Green Mamba lay hidden, he paused a moment to glance at me to see what I was about to do ; and at that selfsame moment there was a green flash, and the Mamba had bitten him on the top of his bright red comb. With a startled cry he ran a yard, flew, or rather jumped, a full six feet in the air, and fell to earth stone dead.

“Baas, may I have the fowl?” solicited my Zulu assistant.

“Yes, if you go in and get it,” said I. But the native had seen the work of that Mamba, and preferred to retrieve the fowl’s body with the aid of a long pole with a hook on the end of it.

In those days I carried on a considerable number of experiments with snake venoms ; and also tested out the various popular “cures” for snake-bite. This necessitated the use of animals such as fowls, rabbits, and even sheep. I loathed using them as subjects, but I solaced my conscience with the thought that the end justified the means, although I would much rather have used some of the grafters and other parasites of the human race in preference ; but there’s a foolish man-made law which forbids such a procedure. Whenever one of the animals died my native attendant always took it off and ate it.

One day there was a super-experiment which had to be undertaken. Six sheep were to be bitten by Cobras, each snake delivering one rapid bite on a square inch of leg previously shaved. It was to test out the efficacy or otherwise of an alleged sure cure for snake-bite which was, at the time, in use all over

South Africa, and in which thousands of farmers had implicit faith. The stuff was known as Isibiba.

"Inkos," a Zulu assistant asked, "what are you going to do with the sheep?"

I told him that on the morrow they would be used in the way already described. The following day I had occasion to visit his hut and noticed several strange men and women.

"Inyorka, who are those people?" I demanded. "I thought I told you I didn't allow strange kafirs to come loafing round here?"

"Inkos, let me explain. You said I could invite my friends for special occasions to feast and drink beer. The Inkos has six sheep, and they will soon be dead, and I have asked my friends to help me prepare and eat them."

The fellow was so used to the animals dying after experiments with those "popular cures", that he took it for granted there would be lots of mutton; and so there was. Cooking destroys the poisonous properties of snake venom; and besides, when swallowed it is digested and rendered harmless.

There was an old native at East London known locally as "Never Die", because he had been bitten by snakes, stung by scorpions, centipedes, and failed to die. Old men said they had known him when they were boys and "Never Die" was even then an old man. All the same, I did not of course believe them; but it is rude and risky to call a man a liar to his face unless you are reasonably certain you are better with your fists than he.

"Never Die" sold snakeskins, pickled insects, and all sorts of odds and ends to tourists ; and he toyed with live snakes for their edification. Why, for ten shillings he would even undertake to bite the head off a live, squirming venomous snake, for, although old, his teeth were good and sound. I was with a party from a ship, and noticing a collection of people, and thinking a fight of some sort was on, I pushed through the ring and saw "Never Die" with a small live Puff Adder between his finger and thumb. He was offering to bite off its head for the usual fee. Three of my fellow passengers contributed half-a-crown each, and solicited the balance from me.

"No fear, not on your life," said I. "I'm not going to be a party to so dangerous and gruesome a performance."

Somebody else put up the balance, and "Never Die" inserted the snake's head between his teeth and bit its head off, and I went away sorry it hadn't bitten back.

A bank accountant's double life was exposed to the myrmidons of the law, and to the benevolent criticism of his brother-man, by the interference of a snake. The man in question seemed untiring in his work because he never wanted a holiday. For fifteen long years he had not taken a single day's leave, and when importuned by his manager to take a month or two off now and then, he always laughed it off, and jokingly declared he was never happy away from his books and his office. He had been out all day (Sunday) at a client's farm, so he

told his lawful wife ; but, in reality, he had an unofficial wife in a big town some forty miles away, whom he went to see when his conventional home irked him. He was returning to his lawful residence about sunset on a pleasant Sunday evening alone in his motor-car, and, stepping out to open a gate, he trod on a Cobra, which retaliated by biting him on the offending leg above the boot. The fangs went through the trousers and sock before penetrating the flesh ; else he would never have reached home alive, for a Cobra is able to inject eight minims of venom ; and the minimum at a good fair bite is five, and two minims or drops are sufficient to cause paralysis and death in quite a short time. Leaping back into the car, he raced for home, and, staggering in, he collapsed on the floor. An injection of anti-venomous serum revived him, and next day he was quite out of danger ; but the paralysing effects of the poison had not yet disappeared. Despite the remonstrances of his family he insisted on getting up and going to the office in a taxi. Arriving at the bank, he entered his office, but after a couple of hours he fainted and was taken home, where the doctor kept him for some days, the bitten leg being still rather numb.

Meanwhile the audit inspectors paid one of their surprise visits to the bank, and had audited the books, with the result that an irregularity was discovered, which put them on the track of a most ingenious and elaborate system of fraud covering a period of fifteen years. The total defalcations of this man amounted to £16,000 odd. It appears

as long as he was on duty when these audits took place it was easy for him to cover up the frauds ; but the unfortunate intrusion of a Cobra into his career upset his carefully-laid schemes.

When a boy I revelled in the thrilling stories of adventure of the cowboys and frontiersmen of the backwoods of America, and read that these men often carried a horsehair rope with them. It was not used as a lasso, but as a method of defence against rattlesnakes. When camping on the prairie at night the rope was coiled in a ring and the cowboy slept within this, to him, magic circle, quite confident that no venomous serpent would cross the rope. These men could offer no explanation as to why it was efficacious in this respect ; but, nevertheless, they had implicit faith in its snake-repelling qualities. The danger was ever-present, during the warm season of the year, of rattlesnakes creeping under the sleeping men's blankets and snuggling up against them for warmth. This use to which hair ropes were put is ridiculed by naturalists, but, all the same, it is quite probable they did discourage snakes which sought to cross them. A plaited hair rope bristles with hundreds of fine little hair points sticking out in all directions. A snake progresses by means of its ribs, which work the shields of its abdomen to grip the inequalities of the surface it traverses. As these shields move forward they partly open, exposing the tender skin beneath ; and when the snake endeavours to pass over the rope the tiny bristles of horsehair prick it, and, naturally,

it would be inclined to become alarmed, turn back and move away, because snakes are furtive, nervous, and suspicious, knowing that most living creatures are either prey or enemies.

It would also most probably investigate the rope with its sensitive forked tongue, and ascertain by that means it was not a desirable object to pass over.

CHAPTER XVIII

Arboreal and terrestrial snakes—Raining Puff Adders—A practical joke—The Britisher's equipment—Shooting a sjambok—Joke which had a tragic ending—The Mamba's schoolboy victim—Hunting man-killing Mamba—Young farmer's awful death—Skeleton found after six months.

SOME snakes are arboreal by nature, and although often seeking their prey upon the ground, they instantly retreat into the scrub and trees when alarmed. Others are terrestrial ; the Adders especially so. However, there are times when even these climb trees and seek sanctuary or added comfort among the foliage and branches. The sluggish, heavy, and apparently clumsy Puff Adder does not seem capable of climbing a tree. No snake, of course, can climb a straight-stemmed, smooth-barked tree ; but when the branches are fairly low a tree-snake, such as the Mamba or the Boomslang, can whip its body up into the branches or climb rough bark. Terrestrial snakes, such as the Puff Adder, can only negotiate the trunk of a tree if its bark is rough, when it has an appreciable slope, and the branches are sufficiently low to enable it to get a leverage by means of them.

One day we camped under a solitary tree standing amongst dense, stunted herbage. With much care we cut away the undergrowth and made a real nice

clear space on which to camp for a couple of days. Our waterproof sheets, blankets, and other things were spread out, and two members of the party went forth to procure wood from a near-by thicket. It was sundown when they returned, and we built a big fire, proceeding forthwith to prepare our supper. Some of the wood was not too dry, and consequently it gave off volumes of smoke, which slowly rose and percolated through the tree. One of the party was holding the frying-pan over the burning brands—the rashers of bacon were sizzling appetizingly—while another of the party was carefully breaking eggs into a cup so as not to rupture the yolks. Suddenly, down dropped a Puff Adder right into the pan, scattering hot fat on to our clothes, hands, and faces. Naturally, we scattered too, but only to quickly return with heated brains to put an end to the half-burned snake. I assured the others that Puff Adders did not usually climb trees; and that it was the most unlikely thing in the world for another to be in this particular tree. While I was in the very act of soothing their jangled nerves, a second dropped, and then a third. While we were trying to kill these, two more fell—five in all. Yes, I know, it does seem to be too much of a yarn to ask any intelligent person to believe; but, all the same, there isn't a word of a lie in the story, with the exception that there were seven Puff Adders, not five. I didn't say seven in the first instance, because I knew that many readers would say, "Well, that's the limit!" The occurrence is accounted for in this way:

The herbage was dense, and the ground cold

and damp. The tree afforded the only chance for a snake to bask in the sun's rays ; and so these enterprising Puff Adders climbed the one and only tree to lie on its topmost branches, over which the sun's rays streamed. The smoke and heat from our fire caused them to fall. This incident happened not far from Schoenmaaker's Kop (Shoemaker's Head), adjacent to the demarcated forest area, near Port Elizabeth, which is covered with willow trees, the seed of which had been originally imported from Australia. These trees grow like weeds on the sand dunes and along the coast generally. They shed a black seed, which is good nourishing food for rats and mice, and, in consequence, the native striped field mouse, or streep muis, increase enormously in the presence of such an abundant food supply. Puff Adders are their natural enemies, and, as is only to be expected, they also increase apace. The tree under which we vainly sought to camp provided a big food supply for the mice living in the vicinity. If you are a farmer and want to attract snakes, you have only to let the mice and rats breed and multiply. The snakes will very soon find them out, and if you are not afraid of an occasional Cobra, Mamba, or Adder in your bedroom, in the toe of your boot, or in your motor-car, then leave them alone, and they will keep the rodents in check.

A fellow once played a trick on me, and if he had not been my chum, or at least one of them, I would have jolly well punched his head. The lay assistant knocked at my office door.



THE BLACK-NECKED COBRA (*Naja nigricollis*), WHICH THE ZULU PEOPLE CALL THE M'FESI, GROWS TO A LENGTH OF SEVEN FEET. LIKE THE RINGHALS COBRA, IT POSSESSES THE POWER OF SPITTING ITS VENOM IN A FINE SPRAY TO A DISTANCE OF EIGHT TO TEN FEET



JOHANNES AND HIS UNDERSTUDY GIVING A PYTHON A SUNBATH AFTER IT HAD INCUBATED ITS PILE OF EGGS BY LYING COILED AROUND THEM WITHOUT FOOD OR WATER FOR THREE MONTHS. ONE OF THE CHILDREN IS SEEN LYING IN FRONT OF ITS MOTHER

"Come in," I growled.

Handing me a small oblong box, he explained that a gentleman had called and told him to give it to me ; also that it contained a wonderfully beautiful specimen of a lizard. The assistant retired and I put the box on the table at my side. Presently I reached out for it, and, seeing a finger-groove in the lid, I pushed the top of my forefinger into it and shot back the sliding lid, which moved in a groove on either side. All I saw was, apparently, the head and neck of a Green Mamba dart out, and the next instant I felt a smart on the back of my hand. Hastily casting the box away, I examined my hand, and there, right enough, were two bleeding punctures. Folk like us who work with serpents and their venom don't waste time making unnecessary fuss. Striding into the laboratory, I picked up a lancet and scarified the sites of the punctures, applying a ligature above the elbow, and sucked the bleeding cuts with vigour. We hadn't any anti-venomous serum at that time, and so, wandering back to the office, I entered, and there on the floor lay the box with the head and neck of a trick-snake protruding. It was one of those contrivances which cause the head of a wooden snake to dart out when the lid is pulled back. In the gaping upper jaws two pinpoints served the purpose of fangs. Was I scared ? Yes, most certainly I was, because in those days I felt full of the joy of living, and the instinct of preservation was naturally strong. All the same, it was a mean sort of trick to play on a fellow, was it not ?

Almost numberless are the stories concerning the
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Black Mamba ; and farmers living in intimate association with them have wonderful anecdotes to relate. Many of these stories have become grossly exaggerated by being told too frequently ; others are true in detail ; while many are purely the imaginings of natives. However, the reader can rest assured the stories related by me are true.

When I was a young and irresponsible fellow I loved to roam the country. At that time I lived in Natal. I travelled mostly on a Basuto pony, accompanied by a pointer and two fox-terriers. I was questing for knowledge about the creatures of the wild and collecting specimens for museum purposes. I happened on a chap who had recently arrived from England. His parents had sent him out as a student to a farmer, who received a substantial premium for training youths into the secrets of South African methods of gaining a living from the soil. I often stayed week-ends with this farmer, a brother of an English earl, and I was present when the young man arrived. Sitting on the side of the bed, I talked about the Mamba and its frightfulness, as is the way with South Africans living in Mamba country, while the young man busied himself unpacking his trunks. My eyes presently caught sight of something which shone—no, it wasn't a Mamba. It was a long, glittering, double-edged dagger which the Britisher had unpacked and taken out of its sheath. Then beside it he placed a rifle, revolver, bandoliers of cartridges, and more ammunition in boxes.

“Good Lord,” I unconsciously ejaculated. “Why did you bring those out with you ?”

It seemed South Africa, to him, was believed to be a land teeming with wild bloodthirsty savages, roaming in bands and ever ready, when the chance offered, to slay the white man. Hungry lions, leopards, wolves, and other ferocious carnivora were supposed to be lurking in every bush. This young man had come prepared for all emergencies. But the stories I subsequently related of Mambas and the deadly nature of their venom gradually engendered so great a fear and horror in him that he grew increasingly nervous ; but the British are a stubborn, brave, and reserved people, and he didn't let on overmuch that he was now living in dread of a Mamba springing out at him from a near-by bush.

Whenever he went out for a shoot his legs were carefully encased in leather leggings, and he also wore a thick coat in which he sweltered. Poor fellow, he had good cause to be scared, coming as he did from a practically snakeless country into a locality which teemed with Mambas ; he frequently caught glimpses of them gliding off and vanishing from some sun-baked rock, bank or shrub. Almost daily a story would be heard of a Mamba having killed a Kafir, a head of stock, or someone having had a frightfully narrow escape from being bitten by one of them. In those days there was no anti-venomous serum available, and the knowledge of the scientific treatment of snake-bite in other respects was crude ; and so the cases of death from Mamba bite were practically cent per cent. When Curator of the old Natal Society Museum, I wrote every resident magistrate in Natal and Zululand and as

many district surgeons as possible, and appealed through the Press for cases of recovery after having been definitely bitten by a Mamba. Not one authenticated case was reported. We all knew that when hunting Mambas a bite meant death as surely as a bullet through the brain.

Reclining in a lazy man's chair on the stoep of the homestead referred to on a sultry morning, the young Englishman saw what he took to be a Mamba, and the following verses by Frank Aitchison tell the story :

'Twas on a sultry summer's morn,
Beneath a shady stoep,
A low-veld farmer (British born)
Espied a lissom loop.

'Twas dark, malignant, lithe and long
(A most convincing sign),
And there it lurked, repulsive, strong,
In shadows 'neath a vine.

The farmer shifted in his seat
With some celerity.
Then rising slowly to his feet,
"I'll settle you," said he.

"A snake," he cried, "here in the shade!
Mfana! Hamba! run!
Bring me my longest-handled spade;
No, no, no, bring the gun!"

The gun was brought, and in the gloom
The farmer saw the thing
Which, at the weapon's sullen "Boom",
Gave one spasmodic spring.

Then fell inert, and, moving not,
The farmer in his joy
Went up to see what snake he'd shot,
Attended by his "boy".

But swiftly now his former dreads
Gave way to blank dismay.
There, shot into a dozen shreds—
His former achter sjambok lay !

Talking about Mambas reminds me of a story which is stated to be positively true. A young farmer went off for a day's shoot with a friend, and on the way home an adult Black Mamba was sighted and shot. Tying a loop of cord round its neck, one of the fellows trailed it along behind him. When near the homestead, the farmer remarked : "I say, Bill, let's play a joke on the wife," not giving a thought to any serious results.

Slipping through her open bedroom window, he laid the dead snake on the floor in a living attitude well in sight of anyone opening the door. After relieving their hunger, the young husband remarked casually, "Mary, I wonder if you would mind fetching my pipe and tobacco-pouch from the bedroom?"

Mary went, and the two young fools exchanged grins and waited, expecting to hear a shriek and to see Mary in a wild state of fright come running into the dining-room to impart the fact that a live Mamba was in the bedroom. But dead silence prevailed and, growing uneasy, they went forth to investigate. The door was shut and would not open when lightly pushed. Now, thoroughly alarmed, the husband used all his energy and thrust the door partly open. There behind it lay the body of Mary, face downwards ; and a live Mamba was in the room. It was evident the reptile was in an angry mood and

intended to show fight. Snatching a pillow from the bed, the young man warded off the attack which the snake now launched. Meanwhile the friend had slipped off and, returning with a loaded gun, he shot the snake's head off. Frantically the husband called to his wife to wake, but already her spirit had departed from the mortal body. Three times the snake had bitten her. The explanation of the incident is this :

The Mamba, which the men had placed in the room, was a female in the rutting or mating season ; and the odour left by her trailing body was followed by the male, and the latter ended by finding the dead body of his mate in the room. Mary must have been well in the room before she saw the snakes, and the live one attacked her at once. Facing it, she backed to the door, which, in her agitation, she must have struck and slammed. Before she could turn to open it the Mamba had already bitten her. Sinking down in a faint, the woman died upon the floor behind the closed door.

Another sad and unusual case of Mamba bite occurred near Greytown, in Natal, approximately thirty years ago. The little sturdy son of a farmer attended a school which was about a mile or so distant from the homestead. There was a short cut which led past a sloping hillside that was covered with scrub, boulders and dongas. It was known to the natives for miles round as the favourite lair of a Mamba. Several times the boy passed that way on his journey to and from school. One day he saw

the Mamba and ran for home, but the serpent did not attempt to follow. He told his parents of the incident and they forbade him to ever go that way again.

Winter supervened, and when the spring was well advanced the little fellow, having dallied overlong at school, feared to arrive home late and took the short cut. Alas ! the Mamba was out on the prowl for food, and, sighting the boy, it advanced upon him. Throwing away his satchel, he raced for home ; but, finding he was being rapidly overtaken, he paused, picked up some stones and awaited the attack. But his bombardment with stones proved unavailing, and the snake closed in and bit him on the front of the thigh. Hearing the boy's cries of, "Daddy ! daddy !" the alarmed father rushed out and was just in time to catch his son in his arms as he fell. The boy sank to the ground, overcome by the snake's potent venom. The little chap only lived long enough to relate the incident before he died in his father's arms.

The story was told to me some years later by the father, who wept like a child, blaming himself for not having taken more energetic steps—either killing the Mamba or sending a native with sticks to act as bodyguard to his son.

To kill an old Mamba, which has become a man-chaser and stock-killer, is easier said than done. When such a snake loses his fear for our race and gets aggressive, which, fortunately, is not often, he is more to be feared than the very devil himself. It is worse than sitting in a trench during wartime,

with the ever-present possibility of a big shell or a bomb exploding right on top of you. I have helped to slay aggressive Mambas, and know how it feels. You sit still as a stone, hour by hour, with a double-barrelled gun loaded with small shot, watching a sunny glade, a sun-baked rock or some other likely place for a Mamba to frequent. A bird rustles a branch, a lizard scuttles into the grass, a twig snaps, a common ordinary snake slithers past, and your very inside shivers and creeps, and "goose-flesh" comes all over you because you are worked up to the highest pitch of excitement and nervous tension ; your eyes and ears are strained for evidence of the near presence of the Mamba.

One day, by means of sundry bribes, we induced a party of natives with dogs to beat the lair of a Mamba that had killed some cows and a couple of Kafirs. It had been located a few days previously in a patch of broken scrub and rock-covered ground. I was crouching behind a dolerite boulder with gun thrust forward, finger on trigger, watching intently. A streak, leaden in colour, seemed to pass by like a shadow. It went first round the left side of the rock and then under my elbow, past my back and then away. It was the man-killing Mamba ; and I had let it escape. Why didn't I shoot ? That's all very well for a chap with a pipe in his mouth, lounging in an armchair with his friends round him, to make such a silly observation. All I can recall of that incident was the gun going off at random, the charge of shot passing over the heads of the Kafirs ; and, because a few pellets hit one of

them on the shoulder, he demanded five pounds sterling ; but I squared him with five shillings.

A young farmer took unto himself a wife, bought a farm at the foot of the Waterberg Mountains in the Transvaal, and was progressing famously. Being fond of shooting the innocent, unoffending creatures of the wilds, he spent much time—his slack time—up in the mountains. One Sunday morning, armed with rifle, he went forth in quest of buck. He failed to arrive home before dark, and, naturally, his wife became uneasy and as the night lengthened her anxiety grew. Summoning two neighbours, all the available natives were gathered together and the party set off with lanterns. Throughout the night the mountains were searched, but, alas ! not a sign of the missing man could be found. More assistance was procured the following morning and the mountains were again searched. By this time a few European settlers and some fifty natives had assembled, and they decided carefully to comb the whole mountain ; every donga, patch of bush and krantz receiving the utmost scrutiny ; but after three weeks the search was abandoned. Generally it was held that the young man had missed his footing and slipped over a krantz, the body falling among some rocks and thus being hidden from view.

Six months later a native was searching for lost cattle among the very same mountains when his dog came out of a clump of bush with a human arm-bone. The native followed the dog back to whence

it had come and discovered the skeleton of a man. Horrified, he fled and reported what he had found to his master, who at once set off to the spot. There he found the skeleton of the missing man, clothed and with the rifle lying by his side. A closer examination revealed a leather ligature above the right knee ; it was his belt, and in one of the pockets of his trousers was found an envelope with a tradesman's account in it. On the outside, scrawled in lead pencil, were the words :

*Mamba !—It bit me. Getting numb . . . dying . . .
Ethel darling. . . . God bless you . . . good-bye.*

CHAPTER XIX

Fight with Mamba in garden—Mamba versus dog pack—Cow-killing Mamba—Author's awkward predicament—Blinded and lost—A grateful farmer—Sitting on Puff Adders—Python in a bedroom.

A GENTLEMAN who left his mark on the scroll of politics before Natal was part of the Union was busily employed in his flower garden turning over the soil with a spade. Hearing a commotion going on in the fowl enclosure, he proceeded to investigate. A Black Mamba, which had gained entry through the wire netting, was in the act of swallowing a chicken, which it proceeded to disgorge at the sight of the man. While he pondered over what steps to take to encompass the death of the snake, it made a sudden dash for the netting with the object of pushing itself through one of the spaces in the mesh after the manner it had gained entry. The man quickly ran round to the place and faced the Mamba with spade up-raised ; but, although he managed to strike one or two blows, they proved ineffective. The snake was now free and, infuriated by the blows it had received with the flat of the spade, advanced menacingly. Desperately the man sought to ward it off with his weapon, meantime retreating backwards and shouting for help. Two Indian "coolies" came hurrying round the corner of the outhouse, but seeing the

Mamba, they turned and fled for dear life, leaving their master to his fate. The reptile's onslaught became increasingly furious, and finally, with a forward thrust, which was to all intents and purposes a leap, it passed the guard and bit into the man's bare forearm. Before it could withdraw and resume the attack, or turn and flee, it was beaten to the ground and cut in half. Fortunate, indeed, the victim had a complete snake-bite outfit, and the serum in it was fresh. With the help of a Kafir houseboy the arm was ligatured and serum injected. Finding his body was growing numb and that his brain was becoming dazed, the man staggered to the 'phone and rang up a doctor, who raced out in his car to find his patient in a condition of profound coma on the floor, with his native boy kneeling at his side, sobbing violently, thinking his "baas" was dead. The victim had only used one ten-cubic-centimetre tube of FitzSimons' serum, and the doctor finding another in the outfit injected it into the surface tissues of the abdomen, with the result that in about half an hour he had the pleasure of seeing his patient recover his senses. After two or three days of lassitude and general lack of nerve-energy the man made a complete recovery.

Another almost parallel case occurred, but the Mamba only succeeded in delivering a hasty bite with one fang. The victim, in this instance, recovered without the use of anti-venomous serum; but five years later he became quite blind owing to paralysis of the optic nerves.

The deadly nature of the venom of the Black

Mamba was proven some years ago at Gatooma, in Rhodesia. A hunt club was out with a pack of dogs in search of wild pigs. A Black Mamba broke cover and made off with the yelping dogs in pursuit. Finding itself being overtaken, it slithered into a low shrub, raised its head and the anterior part of its body well above the bush, and awaited the attack. Like a whirlwind, the pack were upon it, each dog trying frantically to obtain a bite. Possibly within a minute the snake was torn asunder, but in the meantime it had bitten six dogs. One already lay dead, and the remainder perished one by one, the last, a Great Dane, three hours after it had been bitten.

While sipping coffee on the stoep of a friend's farm, an excited herd boy appeared and made the announcement that three cows were lying dead near the drinking pool. We went along to have a look and, sure enough, three fat cows were lying peaceful in death.

"A Mamba's work," quoth Hendriks, who owned the cows.

"Yes," I said, "that's plain enough. Let's clear ; the snake may come out at any moment and attack us."

Forthwith we fled, with many a backward glance, and on reaching the homestead we held a council of war. Two hours later, armed with shotguns, we stationed ourselves in carefully selected positions. Several of the natives, primed with Cape brandy and the promise of half-a-crown each, agreed to beat the patch of scrubby bush which bordered one side

of the pond. Some of the natives carried flaming brands to light the scrub wherever it would burn, while the others thrashed the bush and cast stones into it. Shouting lustily, singing snatches of songs so as to keep up their courage, they advanced in crescent formation. Presently, into the open on the opposite side of the rough-tangled rock and scrub-covered patch, a Black Mamba glided. Pausing in his flight, he majestically reared his head aloft to survey his immediate surroundings, taking his bearings before diving down again to retreat some other way. Before he could decide on which direction to take, the slayer of the cows was shot to pieces by two of us who fired almost simultaneously. He was a beautiful specimen, of the colour of polished gunmetal, measuring ten feet nine inches.

There was a time in my life when I often used to sally forth on my Basuto polo pony, a pointer dog and two fox-terriers, to obtain specimens for the old Natal Society's Museum at Pietermaritzburg. I was Curator of it for nine years, and during that period I collected from various parts of the province of Natal most of the specimens which the Museum then contained ; and I also renewed nearly all the old original mammal, bird and reptile exhibits, which, as usual in old museums, were badly mounted. I learned the art of taxidermy because it was a hobby of mine to restore to the semblance of life any creature of the wild ; and having sufficient of this world's goods at the time, I could pursue my hobbies without the usual restrictions.

At that period in my life I happened to be looking

into the ways and habits of snakes, and the nature and possibilities of their venom. As a result, I was desirous of procuring as many live, uninjured snakes as possible. Needing a Black-necked Cobra, known to the natives as the "M'fesi", to carry out some experimental work with its venom, I was always wide awake for a sight of one. One day, while riding along a Kafir path or track through the bush which was too short and scrubby to term a forest, there, basking in the sun's rays, was a lovely specimen. It instantly slid away to cover. Quickly I was off the pony and after it. My dogs were trained to obey me implicitly, and at a word of command they lay down by the pony while I followed the snake into the scrub, which was matted on top with creeper growths, but more or less clean underneath. I repeatedly tried to pin the reptile down with the barrel of my gun, but it eluded me every time. Farther and yet farther it retreated into the bush, turning to face me every time I succeeded in getting near enough to attempt a capture. It was a most interesting sight to behold, and to notice how quickly the snake swung round, reared, and expanded its hood, waiting for and defying me to come to grips. Crawling through bush like a reptile, among dead twigs, leaves, and other obstructions, and dragging one's gun along at the same time, does not give much opportunity to display agility at snake-catching. The natives had always told me the "M'fesi" was a spitting snake, but I did not believe this to be true. However, I was soon to find out that really and truly the "M'fesi" was

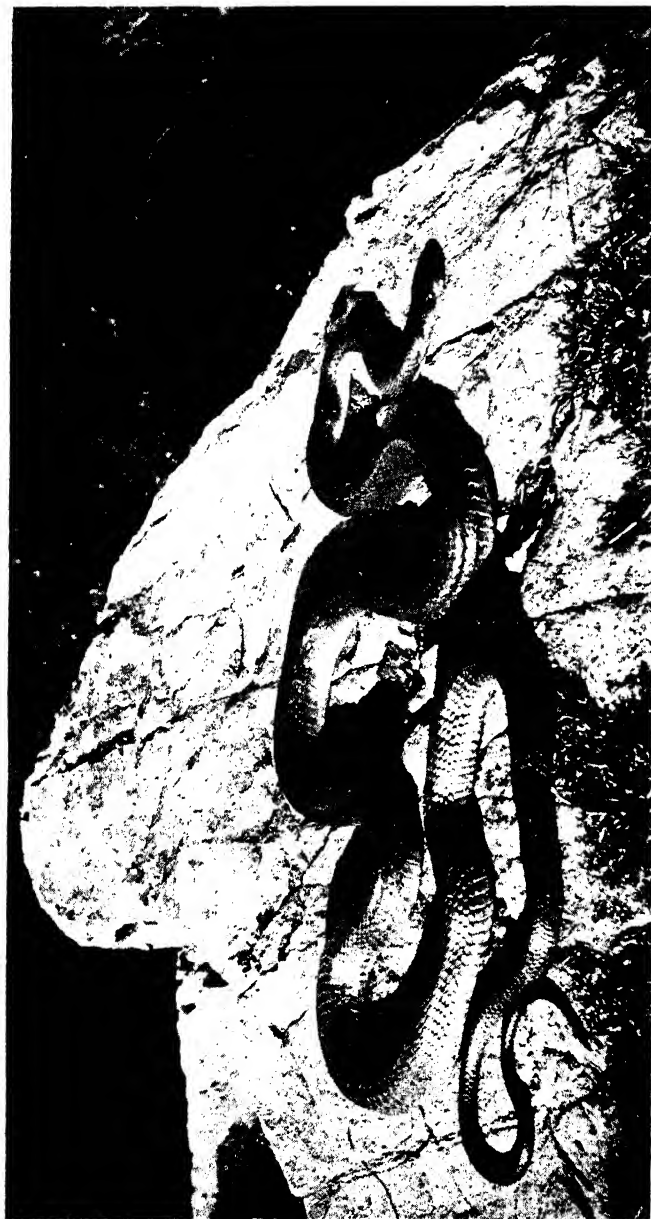
indeed a spitting snake for presently I received a charge of venom at four-feet range, which blinded both eyes, causing frightful pain.

In those days I taught boys at Sunday School and yarned to them at guild meetings. My aunt and grandmother, with whom I lived, were pious folk, so obviously I hadn't learnt any bad words, either in English or in Zulu, so, when the Cobra spat in my eyes, I used a lot of Bible phrases to relieve my pent-up feelings. Afrikaans, one reader might say, has in it a goodly number of swear-words, some of them choice, but they had not been invented in those far-off days. Anyway, I fired two charges of shot in the direction of the snake, purely out of revenge, and sat lamenting my fate, feeling very sorry for myself. There in the midst of the bush, nine miles from home, was I with eyeballs burning like fire, and blind. Time and again I sought to lessen the pain by moistening the eyes with saliva.

After what seemed an almost interminable period of agony, for I had lost count of time, I whistled for my dogs, who instantly and gladly responded. Their presence somewhat comforted me, but what to do I knew not. Some of the venom had been absorbed into the circulation through the inflamed mucous membranes of the eyes, and I was getting drowsy. From this condition I apparently sunk into a coma, from which I awakened to hear the whinnying of my faithful pony, who had been trained to remain on the spot where I had last left him. This was accomplished by teaching him that, when the reins of the bridle were upon the ground, he must not move



...A. BLACK MAMBA (*Dendraspis angusticeps*), SNAPPED WHEN ABOUT TO MAKE A DIVE INTO THE THICK SCRUB



BLACK MAMBA IN ITS NATIVE WILDS ON A ROCK BASKING IN THE SUN'S RAYS. THE APPEARANCE OF A HUMAN BEING, OR THE SNAPPING OF A TWIG, AND IT IS GONE LIKE A FLASH

away from the place where the rider had got out of the saddle. I called his name, and he repeated his cries for me ; and in this manner I was eventually able to reach him ; but that awful groping, stumbling and crawling journey through the scrub is impressed for ever on my brain. Still blind, with eyeballs feeling like live coals, I crawled up into the saddle and gave the pony his head, lying along his neck to escape overhead bushes. Truth is often more difficult to credit than fiction, but my pony—Rory, his name was—in due time, which seemed to me like eternity, arrived at the gate of my estate, “Gorahwood”. I dismounted, opened the gate, and again climbed on to the pony’s back. My cries and the stones I threw upon the roof brought my aunt and the servants out, and I was carried in and put to bed ; it was heaven. My eyes were bathed copiously with warm milk, which soothed them considerably. But why go into further detail ? In ten days I was out and about again with normal eyesight and bloodshot eyeballs. Anyway, I had acquired a bit of knowledge, because I learned then for the first time that it was true the Black-necked Cobra spat venom, and the information was duly recorded and made public, so that another fool like myself should not deliberately invite a “M’fesi” to spit in his face.

A farmer at Coldstream, in the Tzitzikama Forest area, which is on the road running from Port Elizabeth to Knysna, had a rather harrowing snake experience. While on the land ploughing,

he put his foot upon a Puff Adder, which promptly retaliated by driving its long fangs well home in the calf of his leg. Kicking the reptile off, he made for home, which was some distance away ; but his wife had gone to the store, some two miles distant. The accelerated beating of his heart in hastening over the ploughed ground and through the tough, clogging herbage had very efficiently circulated the venom. In consequence, the man's senses were beginning to desert him. With a supreme effort of will, he braced his failing muscles, took down the snake-bite outfit which had been reposing on a shelf for two years, and succeeded in injecting himself with a full dose, namely, twenty cubic centimetres of anti-venomous serum. Falling across the bed, he became unconscious. Thus his wife found him two hours later. Slowly he regained his senses, and from that time recovery was rapid.

Some time later I was in the vicinity with my son Desmond, excavating a large Strandlooper kitchen hidden in a rock shelter, when the man came to me with some pottery of this, now extinct, race of cave men. The pieces were those of the biggest Strandlooper pot extant and, naturally, it was of great scientific interest and value. I wanted to pay him for it ; but he was most indignant at the suggestion. The reason was, he thought I had been the indirect cause of his still being in the mortal body. It seems I had given him the snake-bite outfit during a previous visit to the locality.

On one occasion my railway travelling companion

was an inspector in the employ of the Government ; and when he found I was "Old Fitzy", of the Port Elizabeth Museum and Snake Park, he began to tell me some stories of his experiences with snakes. Somehow my name always suggests snakes to people, and that's why I am not popular with hard drinkers. One day the inspector was waiting for a train at a wayside station and grew weary of walking aimlessly about. Spying a box on the platform he sat on it. Its side sank in with his weight, but the wood did not break, and he thought all was well. Presently he pulled out his pipe and leisurely filled it. Twisting his body to shove a hand into his pocket for matches—the movement apparently caused an undue strain on the planking of the box—it sagged and crashed. Before the posterior part of his anatomy sank, he heard a terrific hiss—the well-known warning of the Puff Adder.

"Yes, and what did you do then ?" I remarked ; I was getting interested.

"Do?" he dryly answered. "I shot off that box as fast as an arrow from a Bushman's bent bow."

Proceeding, he told me how he sought out the stationmaster, who told him the box contained three Puff Adders, consigned to the Port Elizabeth Snake Park. "My God !" said he, "when I think how near I came to sitting right down on those snakes ! I even now feel shivery and my very bowels tremble."

Observing I was listening intently, he went on to say, "I had a row with a fellow once, and it was all because of your blasted Snake Park. It was

like this," he proceeded. "I arrived by motor at a village where there were a couple of the usual bug-infested hotels which are, in reality, bars containing an assortment of more or less doctored liquor and a number of cells which pass by the name of bedrooms. 'Full up,' announced the proprietor, 'unless you care to share a room.' Being dog-tired, I shared.

"I awoke with a start and sat bolt upright with a feeling that there was something uncanny in the room. Listening intently, I distinctly heard a mysterious rustling sound, which seemed to come from a corner of the room. 'Rats,' I muttered, and snuggled down again on my hard pillow. But no, it wasn't rats, it did not sound like the noises they make. Lighting a candle, I slid out of bed, strode across the room towards the other bed, but saw nothing to excite alarm or suspicion. Again there came the same rustling noise ; and I peered under the bed and saw a mealie bag with something bulky in it, which moved and squirmed. While pondering and wondering if it were an optical illusion, a nightmare, or the result of doctored whisky, a nose appeared at a hole in the sack. While I gazed spellbound, the hole enlarged and out came the head and body of a Python, which stuck its forked tongue out at me and hissed alarmingly."

"What did you do then?" I queried, seeing the man had stopped talking to draw hard on his pipe.

"Why, what would any man do under those circumstances? Ask the snake to have a drink? No jolly fear, I just dropped the candle and fled out

into the rainy night and made my way to the only place where there seemed to be any human beings, and that was the bar. I told the 'boss' of the hotel what I had seen ; everyone laughed and asked me to have a drink. Then they began to advise me to take more water with it next time, and so on. 'Yes,' I retorted, 'if any of you fellows had been in my place you would have seen half a dozen snakes !' No doubt they would, because men begin to forgather in such rendezvous at about eight o'clock and drink, on and off, mostly on, until about closing time ; and afterwards they talk until well past midnight before staggering home to their sweet-tempered wives."

"But," I interrupted, "where on earth and in heaven did the bag and the Python come from ?"

"That," he said, "is easily explained. When I arrived back at my room with the landlord and the bar loungers, my bedroom-mate came up the road whistling cheerily. 'Hide quick !' I whispered, and we all faded away into the dark shadow cast by the building and the trees. Opening the door, the man went in, and we saw him lighting a candle with an unsteady hand. Then his eyes fell upon the Python in the act of crawling over his bed. In no time he was out of that room. It seems he was a commercial traveller and had bought the Python from a native, and brought it along in his car with the intention next day of railing it to the Snake Park and securing half-a-crown a foot for it.

CHAPTER XX

Buzzards and snakes—How snakes trapped themselves—Catching snakes in rat-traps—Author's wife and Night Adder—Mother's horrifying experience—Author waiting for death—Schaapsteker's revenge—The nurse and the snake—Author's Irish cousin—How a terrier saved its master.

SITTING on a termite hill one sunny day and not thinking of anything in particular, I saw a steppe buzzard drop like a great stone on to the veld. Presently it rose with a squirming snake in its large and strong talons. Up, and yet up it flew, while I casually watched, feeling sorry for the wretched snake. But a second tragedy was developing. The bird away up in mid-air was, seemingly, in difficulties. Yes, sure enough, a desperate struggle was in progress. The buzzard swayed, turned over, righted its body, then began to ascend, but once again it fluttered, turned over and over, collapsed, and began to fall with wings growing increasingly impotent. While yet a good distance aloft its wings ceased to beat, and the body of the bird came down with gathering speed to eventually crash upon the ground. The cause of the tragedy was soon made apparent. The serpent was one of the non-venomous Olive House Snakes. The bird, after pecking the reptile's head, ascended into the air, presumably to carry its prey to a convenient ledge of rock, the branch of

a tree, or to its eyrie. But the buzzard had failed to entirely incapacitate the snake, which threw a coil round the bird's neck and choked it, and there the two now lay dead.

On another occasion we were motoring when a friend of mine ejaculated excitedly, "Look, there's a hawk with a snake!" It was again a buzzard, which flew away ahead of the car, hovered over the hard stone road and dropped the snake from its claws, following as it fell. Swooping down upon it, the bird rose and flew with its victim some hundreds of yards farther ahead and again let the body of the snake fall upon the hard road, the evident intention being to kill it in this manner.

The vegetation and climate of Natal is exceptionally favourable to snakes, and they, in consequence, increase rapidly when conditions are suitable, such as an abundance of cover, rats, mice, and a scarcity of snake-killing people.

We used to live on an estate adjoining Pietermaritzburg, and here was every facility for snakes to breed and multiply; sod fences, stone walls, prickly-pear hedges, lumber, scrub, long grass, rushes, reeds, piles of stacked green bricks, outhouses, forage stacks, and innumerable rats and mice.

We got so accustomed to seeing live snakes every day that we didn't trouble to go out of our way to kill them, unless, on occasions, when they came into the residence uninvited. These occasions, though, were rather too frequent to be pleasant.

Hearing an outcry in the kitchen one morning, I descended the stairs three at a time to find the servants

staring excitedly at the birdcage which reposed on an upturned box. Coiled up and fast asleep inside the cage I beheld a Brown House Snake. During the night the snake had come out of a rat hole, which communicated with a space beneath the flooring of the kitchen where rats and mice love to dwell, and, finding a nice roller canary, slid into the cage and swallowed it, but at the same time trapping itself most effectively. Possibly, after vain efforts to escape, and not seeing any enemy or other cause for alarm, it did the only thing possible, and that was to coil up and wait for its supper to digest. But, when stirred up with a prod from a stick, it brought up the body of the canary, slid out and attempted to get away. It was a non-venomous species of snake and, by nature, a rat and mouse eater. In ordinary circumstances I would have let it go in peace, but I wasn't as philosophical then as I am now, and so the poor thing was slain to glut my ire. Yet, that snake had every right to make a meal of the canary. It was entirely the servants' fault for not hanging up the cage, out of harm's way, from a chain and hook provided for the very purpose.

My wife is as used to snakes as I am, but finding a wooden mouse-trap had sprung its lid, she summoned the cat and then carefully pressed the spring and shook out, not a mouse, but a snake with a mouse inside, to the consternation of herself and the cat ! The mouse had got caught and the snake gained access at the other end of the trap through the wire bars, and deprived the cat of its expected meal.

On numerous occasions we have captured snakes by baiting a wire trap with a live rat or mouse. It's rather a cruel action, but when a Cobra has its lair under your flooring or in some outhouse where you cannot get at it, and you have kiddies romping round in shorts and bare feet, you are apt to forget that rats and mice have rights and wrongs. One of the religions of the Far East forbids its disciples from taking life of any sort or kind, consequently the holy folk of this Faith are extremely lousy and their abodes are overrun with other vermin. Man, like every other kind of animal, has got to battle his way through life or be left behind in the race for an A1 standard of physical, mental, and spiritual efficiency. All the same, no man has any sort of right to take life unnecessarily; but many do so, and salve their consciences by terming it "sport."

It was quite an ordinary occurrence for Night Adders to come wandering on to the stoep on moonlit nights when we were sitting enjoying the cool of the evening talking to our friends. One such evening my wife got up to see to the coffee. In those days skirts were longish, and it was fortunate they were, because she trod on a Night Adder. It retaliated, but, instead of biting her on the leg, it fastened its fangs into the skirt and held on. Seeing the body of the snake trailing after her down the hall-way, I stepped along and put my foot on it.

One evening, my wife and I were strolling down the road about half a mile from our residence, when I saw a snake attempt to slither off through the grass. Striding up, I took it to be a harmless Brown House

Snake, but the night was rather dark. Being young, and, in consequence, unduly careless, I stopped and gripped the reptile by the throat, but in so doing it twisted and laid hold of my forefinger.

"You blanky fool!" shouted my wife, "it's a Night Adder!" But it was too dark for me to make sure.

Hurrying home, the hall light revealed it to be what I originally took it for, but that fifteen minutes of suspense wasn't pleasant, seeing that no serum was available in those days.

When kiddies are small, their little "tummies" cannot hold or digest much milk at a time, and so they have to be fed at frequent intervals. Vivian, my elder son, was a robust, chubby chap who had only seen daylight for about five months. He was used to being fed at two o'clock in the morning as well as at sundry times during the day. The little rascal never, by any chance, omitted to wake almost to the second, and if there were any undue delay in attending to his physical needs he howled like, we may presume for the moment, a profiteer does when he finds himself in that underworld sometimes termed hell. It was not yet two o'clock, but his mother woke up with a feeling of apprehension, and Vivian being her first-born, her thoughts instinctively flew to him. Hastily lighting a candle, she glanced into the child's cot. He lay with one rosy cheek on the pillow, sleeping peacefully, and coiled up against the side of his face was a Night Adder, enjoying the warmth which emanated from the child. Did the mother faint, scream, go into

hysterics or rush into my room and shout for me? No, she did not do any of those seemingly obvious things. She snatched up the startled snake and threw it to the other end of the room. Then she called for me to hunt round for the reptile, which, of course in duty bound, I did; but it wasn't very nice, because there was only the feeble light of the candle; and all I had on was a very thin night-shirt—lovely silk pyjamas for men not having been invented in those days.

I used to do a bit of farming in my spare time on a twenty-acre plot in Natal, the objects being to keep physically fit and to produce the wherewithal to keep down expenses which begin to rise alarmingly after marriage. One day I was helping to renew some fencing-poles which had been sadly damaged by white ants. Sitting on the ground, I thrust my hand into a hole from which a pole had been pulled for the purpose of scraping out the debris left by the termites. As it happened, there was a Puff Adder in that hole, and my fingers lapped round and under it. Even now I can remember the cold shiver of horror which went like a wireless wave through my body, and out on the top of my head. Yes, the snake bit me all right, and the scars are still visible on the fleshy base of my thumb. This was before we had any serum, and all my wife could do was to scarify the punctures and put a ligature on the arm. For fifteen minutes I sucked the wounds and then sat down and waited to see if I would die or not.

My wife sent for a doctor, but all he could have

done was to certify the cause of death if the venom had prevailed. I can tell you it isn't nice at all to sit idly watching your hand and arm turning purple and getting bigger and bigger, and to feel it throbbing and aching like mad. The ligature had got to be taken off before long, and I began to wonder what it would feel like when the venom went with a rush into the body and whether it would be enough to cause death, and how it would feel to slowly die. My numerous sins of commission and omission flashed like movie-pictures through my brain, and I fell to wondering if the sky-pilots were right that there was a hell and purgatory awaiting the poor sinner. The ordeal had to be faced and so the ligature was removed. Then the swelling and discoloration crept up and slowly spread over the shoulder and breast. Was it going to affect the lungs? because, if so, they would be drenched with life-blood. But all went well, and after some twelve hours waiting to see if I were going to lose my mortal body, the turning-point came.

On another occasion a snake bit me; it was a Schaapsteker, and nothing happened but a temporarily paralyzed arm and cold shivers. It occurred in this way: walking across the veld I saw the cast skin or slough of a snake in the grass. I knelt down and began to carefully disentangle it, owing to the skin being very fragile. The snake was taking off its coat at the time, and I, inadvertently, pinched its tail, which was inside the partly shed skin. Naturally, the reptile bit me on the hand as a protest; and I, being hasty-tempered in those days, jumped on the poor little chap with both feet, and wished afterwards

that I hadn't ; but then, I have done heaps of things since which I wish I hadn't. Once again a Schaapsteker bit me, and it served me jolly well right, for I was trying to make it bite the bare thigh of a fowl in carrying out an experiment for the purpose of watching the effects of its venom. So, instead of the fowl, it bit me on the thumb, and I was able to note the nature and effects of the venom much better. The venom is a nerve poison, there being no swelling, only slight discoloration of the tissues in the vicinity of the bite, loss of sensation locally, cold sweats and shivering fits.

At one time we had a nurse for my son Vivian ; we imported her from Mauritius, where no one ever sees snakes, but, inconsistent as it may seem, the natives have a far greater horror of snakes than we who live among them. This incident, which I am now going to relate, occurred in Natal. The nurse was almost daily seeing snakes, or else coming upon their dead bodies on the wire of the fences where natives often hang them. They have a belief that long after death, the fangs are still poisonous should they penetrate a bare foot ; so they, unselfishly, place them where the bare feet of other natives cannot tread. The nurse slept in an outside room which had big square rafters, but no ceiling. Late one night shrieks, as of a human being in direst peril, caused me to bound out of bed, seize a piece of candle, a box of matches, and my ever-ready Irish blackthorn stick, and make off to the rescue. You wonder why I did not have a revolver with me, living under conditions where thieves and

rogues abound. But there was a reason. It was because I plugged an Indian coolie who was stealing some of my fowls on a bright moonlight night. I chased him over the veld, but I was not able to overtake him, and my feet being bare, and the ground gravelly, I fired three shots, one of which went through the fellow's thigh. A Kafir would have been delighted with ten shillings or so "hush money", but not an Indian coolie—they are slim folk—and he blackmailed me.

But to return to the nurse. Those screams referred to came to me in waves, one following the other in rapid succession. Arriving at the nurse's room and finding the door locked, it was a matter of a few moments to charge at it with my shoulder and thus burst it open. With stick upraised, I demanded unconditional surrender, believing I had a Kafir to deal with ; and, striking a match, the candle was lit, and I beheld the nurse cowering in a corner all huddled up. She had completely lost nerve control and was in violent hysterics, shrieking as only a woman can. Cautiously advancing and ready to give combat to man or devil, I cast my gaze round and under the bed ; but, seeing nothing of flesh and blood to tackle or to jump at me, I went to the nurse's assistance. Presently the origin of the trouble was made apparent. "A snake ! A snake !" she screamed. "It fell on my face. . . ." Striding across to the bed, there lay what is known as a Natal Black Snake. It was lying partly on the pillow with two coils of its body round a rat, and its jaws gripping its victim tightly by the head. It seems the snake

had been stretched along a beam, or on top of the wall waiting for a rat to come along. One did, and the reptile instantly seized it by the head and, in its attempts at constriction, fell with the rat upon the nurse's upturned face, its dominant thought being to secure its prey. It lashed, rolled and struggled to get a stranglehold, while the rat meanwhile squeaked lustily.

A cousin from Ireland came out to South Africa and sojourned for a time with me. He was of the usual Irish type, falling into love's pitfalls, ever restive, disliking the plodding routine of daily conventional life, keen and ever-ready for any adventure with devil, man, or beast. He had a weakness, a streak of unaccountable fear in his mental make-up. He could not get used to snakes; they gave him gooseflesh, cold shivers down the spine, and a miserable feeling inside. I was a freelance bachelor in those days, and, having money enough, I was able to do more or less what I liked within limits. So he and I wasted our vital energies, not in wine or women or food, but in roaming and exploring veld, forest, mountain and stream, to find out everything we could about the people of the lower animal world. It pleases us, of course, to term creatures lower animals—in reality, their ways and habits are not nearly so bestial as those of the majority of our race.

One evening we removed our goods from the pack-horse and made a cosy bed upon the dead leaves and mould in one of those deep recesses in a dense Natal forest. We then turned in, after placing some

logs on the fire, because there were leopards prowling round in those days ; besides other species of thieving night folk. Turning out the following morning, the Zula native, when shaking up the bed covering, began to emit various ejaculations of surprise and alarm. There upon the lower part lay two nice plump Night Adders, a small Black Mamba, five scorpions, three centipedes, uncountable beetles, spiders, and other small creatures of the wild. Poor things, they had all forgathered to enjoy the unwonted warmth which emanated from our bodies. But my Irish cousin had not got hardened to that sort of experience and, consequently, refused to sleep in forests any more. I hated sleeping out in the open, because of the sudden thunderstorms which are apt to rise in the night and let loose drenching showers ; or, should the stars be twinkling, the heavy dew was almost as wet as rain.

It was only a few days afterwards my cousin got a second jar. We took a bathe in the Umgeni River one hot summer afternoon, and, when pulling on a riding-boot, his foot jammed and would not slide in any further.

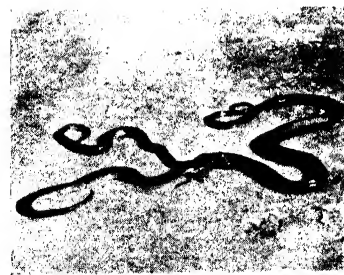
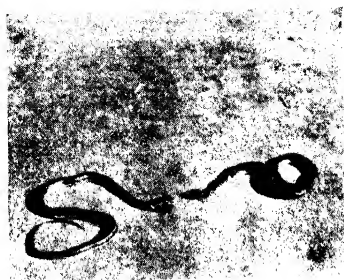
“Blast the thing !” he exclaimed. “What’s wrong with it ?”

“Pull it off and feel inside,” I replied ; “there may be a toad or something of the sort in the toe.”

Instead of that, he beat the heel on a rock, and out shot a half-grown Puff Adder, which hissed hatefully. Then my cousin let loose his wrath upon the country, and called it every bad word he could remember.



HERALD OR RED-LIPPED SNAKE (*Leptodira holamboeia*) WITH TWO HEADS. IT LIVED AT THE SNAKE PARK FOR A YEAR, AND ATE WITH BOTH HEADS, THE FOOD PASSING INTO A SINGLE STOMACH. WHEN ONE HEAD WAS GIVEN A FROG, THE OTHER HEAD FOUGHT WITH ITS MATE FOR THE PREY



THE TRIANGLE

- (1) A SCHAAPSTEKER BEGINS TO MAKE A MEAL OF A FROG. A NIGHT ADDER INVESTIGATES
- (2) A CAPE COBRA OR GEEL KAPEL BECOMES CURIOUS
- (3) THE COBRA TAKES A NEARER VIEW
- (4) UNABLE TO RESIST THE TEMPTATION, IT ATTEMPTS TO SHARE
- (5) EVENTUALLY THE THREE NOSES MEET
- (6) THE COBRA SOLVES THE PROBLEM BY SWALLOWING THE FROG AND THE OTHER TWO SNAKES

He hankered to join a real buck hunt—the kind where about six hundred natives with dogs beat the kloofs and forest patches to drive out the game—animals and Mambas. One of the latter came sliding out of a thicket of scrub, swaying from side to side as it fled over the stubble, matted grass and rocks. My cousin, who was sitting behind a small bush, foolishly fired at it. His gun was loaded with loopers, which are the biggest kind of shot, and we subsequently found that only one had struck the snake. He hastily fired a second time, missed, and ran like a duiker buck, shouting for me. A glance took in the situation. There was the youth running towards me at full speed, and after him was the Mamba.

“Sah, sah, sah!” I hissed to my terrier, and the dear little fellow instantly responded. Forth he bounded, yelping defiance, passed my cousin and closed with the snake. With gun at the ready I followed. Up went the Mamba’s head and he glanced challengingly at me. I expected him to make a charge on the instant, but he didn’t, and, aiming high, I shot his head to pieces. The reason was soon made apparent why the snake did not attack. The dog was lying already unconscious and dying, but, even so, his grip upon the snake’s body was like that of a steel rat-trap.

CHAPTER XXI

Feeding habits of men and snakes—Hunger strikes—Author's record run—Cannibal snakes—Cobra and Mamba fight—Puff Adder and Cobra—Indiscriminate feeders—How a File Snake disposed of two Adders—Popular beliefs about snakes—Serpent of the Orange River.

THE feeding habits of men and snakes are widely different. The former live to eat and also to drink, and work six days a week, or make others work for them, to provide drink, food, and raiment.

Snakes are, however, ascetics in comparison. When the pangs of hunger become too insistent to be borne with equanimity the snake slithers from his lair and captures a live creature which, perchance, may be a rat, frog, bird, lizard, or fellow snake, and he swallows it whole. Should the prey happen to be a rat, it suffices for a full two weeks ; but the snake doesn't get nervy and alarmed if no further food should come his way. Weeks may go by, and provided he secures an occasional drink, he is content.

Why, once I had a Python in Natal, a real giant of a fellow who, resenting the curtailment of his liberty, went on hunger strike. Snakes have known all about hunger-striking for thousands of years. Anyway, this big Python fasted for nineteen months, and, what was more surprising, his moral courage and self-control

was so great that he went on fasting when his favourite foods were put within his reach. Fowls, rabbits, guinea-pigs, rats, were alike ignored. Contrary to popular belief, these creatures do not show the slightest fear when in the presence of Pythons. I have even seen old roosters square up to a Python and viciously peck his head; during the silent hours of the night the rats and guinea-pigs have, at times, eaten holes in the Pythons, while the latter calmly looked on, although a snap of the jaws would have meant death to the cheeky vermin. In their native haunts snakes are so secretive and furtive that it is impossible for the naturalist to discover overmuch about their life-habits and peculiarities. Because of that I had to keep them for observation purposes in large enclosures at Maritzburg, in Natal. Later the Port Elizabeth Snake Park was the outcome of my earlier efforts to find out everything possible about these tricky and much-feared reptiles, which are alleged to have been the original cause of the fall of man, from an idle, care-free, fruit-eating life to one of blood, sweat, toil and hunger.

Snakes are a stubborn people and will put up a bold fight for life when attacked and cornered. But with occasional exceptions they do not assume the aggressive. Sometimes, though, a Cobra on the defensive, with body erect and hood expanded, will suddenly drop to the ground and charge, but if you turn and run it won't follow you for more than a few paces. Its object is merely to scare you long enough to enable it to glide away into the safety of the herbage.

But not so the Black Mamba. You can never be sure what he will do. Usually he will retreat or remain on the defensive, but not always. One of them gave me the fright of my life. I startled him when in the act of swallowing a bird. He dropped his prey and slid into an adjacent broken and dis-used termite mound. I foolishly prodded the hole into which he had disappeared with a stick, with a view to dislodging him ; but why I wanted to take the poor creature's life I cannot now say. He had as much right to live as I had, and more so, because he was one of God's agents in maintaining the balance of Nature ; whereas I am of the stupid, ignorant race of mammals which persists in outraging most of those same laws of Nature. Anyhow, the Mamba shot his head out of the ant-hill, glared indignantly at first, then angrily at me. I made a swipe at him and missed. Hissing defiance, he emerged from his lair and came at me. Already I was on the run. My kind friends used to assert to all and sundry I was the fastest of runners, at soccer and rugby, and in the mile race, but I most certainly never ran with such fleetness and celerity before ; and I am quite sure the Mamba didn't see me for dust.

Wandering along to the Snake Park one day, I saw upwards of thirty Cape Cobras, Black-necked Cobras, Egyptian Cobras, and Ringhals Cobras occupied in swallowing other snakes.

"Frogs are scarce, sir," remarked my assistant. "We have droves of Schaapstekers, Night Adders, and House Snakes, and I have put fifty of them in for the Cobras to feed on."

I mentally calculated how much fifty snakes at half-a-crown each would amount to.

We pay policemen and soldiers to protect us, so that we can go about collecting our daily bread in security ; but the Cobra is a bold, intrepid fellow. He cares not a jot if his life is lost in the quest for food. In the absence of his favourite Schaapstekers, he will tackle any snake. One day a hungry Cape Cobra gave battle to a Black Mamba of equal size. The latter, too, is an aristocrat in snake society, and to shirk a fight is foreign to his nature. So he closed with his adversary, and a real battle, worth two guineas admittance to see, was fought out.

Johannes wanted to stop the fight because we only possessed two Black Mambas ; but I knew the Mamba had already been bitten several times by the Cobra, and it would most surely die ; so we let them fight it out.

"Ten bob to five the Mamba is victor," offered my friend.

"Done," said I.

Presently the Mamba turned over on his back and died. The Cobra, apparently none the worse for the encounter, released his grip and began to swallow his victim, head first. Slowly, like a sluggish stream, the body of the Mamba seemed to flow into the body of the Cobra, until a full half had disappeared from sight. A trembling, shuddering kind of quiver suddenly ran from the Cobra's head to its tail, repeated many times, and then it ceased as suddenly as it began ; the eater of other snakes was dead, slain by the venom of his victim which had been injected into him during the course of the combat.

On another occasion a Cobra gave battle to a Puff Adder, not for the sheer love of fighting, but solely for the sordid purpose of making a good meal. But a Puff Adder is a sullen, bad-tempered fellow, and a powerful fighter too. His warning hiss from the herbage is sufficient to check the boldest man or beast in his stride. The Cobra launched the attack with a fierce bite, aiming at the neck to prevent the Puff Adder from biting back ; but the latter withdrew, and the blow fell upon his back. Almost simultaneously the Puff Adder struck, embedding both fangs deep in the Cobra's back. The smart of it enraged the latter. He let go and bit again, and many times again, but his intended victim held his grip, meanwhile pressing hard down at short intervals. He was pumping venom into the body of his foe. Puff Adder poison is extremely deadly to man and beast ; but it is slow in comparison to that of the Cobra. A man may live for twelve, and even twenty-four hours, after a bite by a Puff Adder, because a lethal dose of the venom causes slow but extensive internal haemorrhage ; and it takes longer for the victim to die in this way than by the powerful nerve poison of the Cobra and Mamba.

Unsheathing its fangs, the Puff Adder struck blindly here, there, and everywhere, and then died.

The Cobra now proceeded to swallow its victim's body.

"Hims will die too," remarked Johannes.

"Yes, of course, but you must just sit here on the wall and time him, and don't sneak off to drink coffee ! Savvy ?" . . .

A knock at my office door, and Johannes' coal-black face appeared round its edge. "Baas, hims dead."

So I went along and had a look, and, sure enough, the Cobra had died after swallowing two-thirds of his victim.

In the Snake Park the serpents frequently become cannibals by accident ; and during the summer-time it is a daily occurrence for this to happen. A snake seizes a frog and begins to swallow it, head first. Seeing the commotion, other snakes come along to have a look ; and they invariably grab one of the kicking hind legs of the frog. Then the desire to suck it in becomes dominant, and inevitably, sooner or later, the noses of the opposing snakes meet ; and snakes are stubborn creatures, especially where food is concerned, and as neither will let go, the larger laps its jaws over the lesser one. Sometimes, though, the smaller gets in first, and with a great gape and forward heave it engulfs its bigger cousin. Struggle as it will, the victim cannot extricate its head, which eventually disappears along with its body and the frog as well. The visitor, well content, crawls sluggishly away to endeavour to find a quiet corner in which to lie and enjoy the fruits of its energy. These sights are too common to excite any interest in us ; but visitors think otherwise. They gather in clusters and watch eagerly, forgetting time and everything.

Dainty slips of girls, fine women, charming elderly ladies, thrill and quiver and remark, "How perfectly beastly ! Loathsome ! Poor darling frog ! It's wicked, cruel, awful ! Poor snake ; the other is

swallowing it ! look ! Shame" ! and so on. But, all the same, not a single soul of them ever by any manner of chance goes away until the performance has reached a finality !

Twice I saw a sight which really did arouse my jaded and waning interest in the doings of the snake world.

A File Snake captured a frog, and while in the act of sucking it out of sight a couple of inquisitive Night Adders came sauntering along. The kicking legs of the frog excited them so much that they forthwith seized one apiece. Soon their jaws reached the top of the victim's thighs. Meanwhile, the rightful owner of the frog had arrived at the hindquarters ; and the three noses met. Obviously the File Snake was puzzled at this unexpected obstruction, which was new in his experience ; and so he paused to deliberate and size up the position. The two Night Adders presently began to struggle, not to eject the frog's legs but to get a more secure grip on them. Then a real battle-royal was waged. The File Snake was determined not to give up his part of the frog ; and it was apparent that the Night Adders had not the slightest intention of doing so either. But the File Snake has a big gape and a powerful push behind his head. With a heave, which had its origin in his tail, he distended his jaws to their uttermost capacity and pushed forward with one long, steady thrust ; and the frog, with the two Night Adders' heads as well, disappeared from mortal ken. Then these would-be pilferers of the File Snake's lunch, realizing their peril, struggled mightily to withdraw ; but the

File Snake's armoured jaws were tightly clamped upon their heads.

It was obvious to us the battle was won, but would the victor spit out his victims? What; throw away the fruits of his victory? Men may do so and often do; but not so a snake.

After the frog and Night Adders had been completely swallowed, I gently placed the File Snake in a box, padded with wool, and kept him under observation to find out how long it would take for his meal to digest. It was fifteen days before the X-rays revealed to me that every particle of flesh, and even the bones of the victims, had been digested by the reptile's powerful gastric juices. The File Snake had previously been rather emaciated, but now he was plump, sleek, and handsome to look upon.

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Knowledge has come to us from the dim and distant past mostly in three ways :

- (1) The spoken word.
- (2) Drawings, carvings, and paintings.
- (3) The written word.

The first is quite unreliable. Tell a story to a man and ask him to pass it on, and in five years' time you could collect a thousand people who had heard the yarn first or second-hand and you would find they all differed very materially. Mankind has an innate tendency to exaggerate a story in the telling to make it more interesting. Take the average woman, for instance. Over afternoon tea she hears a bit of gossip or scandal and, behold! within a week the

whole dorp, town, or city knows all about it, and no two versions are alike.

Apart from the natural tendency of the human mind to exaggeration, many other factors come into play. The average person is a very poor observer, and when he sees a phenomenon which is new to his experience, or which he cannot understand, he invariably puts his own interpretation on it ; and fact and fiction soon become inextricably mixed. The spoken records of the past history of all races of men are altogether unreliable. They are merely a jumble of superstitions, beliefs, folk-lore, and wrong interpretations of the various phenomena of Nature, with a very attenuated addition of fact, like veins of gold in a chunk of rock.

Take, for instance, the alleged true stories in regard to snakes, which have been handed down to us from the Hottentots, Bushmen, and Bantus.

When I was in Zululand long ago the Kafirs warned me never to go to a certain large and deep pool under a waterfall on moonlight nights, because a huge venomous snake which spat yellow poisonous fire and had a big gleaming green jewel set in its head lived in the pool. The belief was universal with the natives, and when I declared my intention of going to keep watch and slay the serpent, they all bid me a tearful farewell.

Of the many scores of popular beliefs about snakes and alleged remedies for snake-bites in South Africa, there is not one which is true. Yet we meet with folks daily who declare their unshakable belief in one or more of them.

At one time everybody believed in the Basilisk, a fabulous creature variously regarded as a huge serpent, lizard, or dragon. It was supposed to inhabit the desert of Africa, and even its look was fatal. There are women whose gaze is fatal to the peace of mind of some men, and it even kills them, or, rather, they foolishly go and kill themselves. These are the only basilisks known to science.

Serpents supply the material for a marvellous lot of legendary tales, folk-lore, and mysticism. In Greece, India, Egypt, and Mexico there are carvings and drawings in profusion, on stone, wood, and bone, ivory and metal, of winged and wingless serpents.

Why, even the beautiful Garden of Eden, where Adam dwelt in peace and harmony, was invaded by a big serpent, and, wonderful to relate, this particular snake knew how to speak the language of Eve.

In the divorce courts to-day we often learn about that species of snake.

The Bushmen in their rock paintings sometimes depicted great snakes. That these existed there can be no doubt, even if the Python was not still living to bear witness. The Bushmen, we know, were true artists, because they drew and painted exactly what they saw, and very true to life too.

It is not logical to argue that because the belief is widespread that a great serpent must of necessity live in the Orange River of South Africa.

Hundreds of baseless beliefs pass as fact, and these are just as common, and even more so.

All the wise men of classic times believed the world

was flat, and poor old Galileo was roundly spanked because he dared to differ.

Take the universal belief in mermaids. The old-time sailors, before the advent of telescopes, mistook those sea-mammals, the manatee and the dugong, for mermaids and mermen. On their return home they told what they saw, and, naturally, the artist, being a lover of beauty, drew and painted the mermaid with a beautiful woman's body and a nice glittering tail like that of a fish. Yet the mermaid's prototype had a noseless face, which was flat and ugly, a waistless body, and a hideous tail that did not even glisten.

That a snake of large size has been seen in the Orange River can well be believed.

The South African Python (*Python sebae*) attains a length of about twenty feet and a circumference of twenty-four inches.

Sir Andrew Smith, in his *Zoology of South Africa*, says he killed a Python of twenty-five feet long. Pythons are very fond of water, and frequently lie submerged for a whole day with only their nostrils protruding above the surface.

They hunt for their prey largely in, and in the vicinity of, rivers, pools, and marshes. The Python is an expert swimmer, and when alarmed it instantly sinks out of sight and swims beneath the surface of the water until it reaches a place of safety, which is usually the vegetation-covered banks.

In Natal, with the aid of a party of natives, I sometimes hunted Pythons in order to capture and keep them in captivity alive. When a river, pond, or marsh happened to be within reasonable distance,

the frightened snake would invariably make for it, and, if not overtaken, it plunged into the water and was lost to sight.

On many occasions I have watched Pythons on hot summer days in Natal lazily swimming down, up, or across rivers.

The great serpent of the Orange River is, no doubt, a Python of unusual size, and there is no reason why there should not be several of them living among the vegetation on the banks of this river, and that they are occasionally seen swimming about.

All the folk-lore, legends, and superstitious beliefs, then, in this case, have probably a good foundation in fact.

CHAPTER XXII

Two-headed snakes—Jumping snakes—Determined opposition to erection of Snake Park—Bones of snakes—Swallowing snake venom—The hibernating season—A Zulu's fate—The surly Puff Adder—Snake-killing dogs—Snake-catcher's stoicism—Child saved by a dog—The sergeant's thrill—Bitten by a Cobra and saved with FitzSimons' anti-venomous serum.

MANY a time I have been asked, "Is there a snake with two heads, one at either end of the body?" A man from an up-country dorp claimed to have proof positive that some snakes do possess two heads, and he triumphantly declared that he had evidence to that effect in the shape of one of these reptiles preserved in brandy.

"Not for a hundred pounds would I let it out of my possession," he replied, when I wrote asking him to send it to me for inspection. "If you want to see it you will have to come up here, because I will not trust it to the post."

It was apparent he had no confidence in the efficiency of our postal system! However, he happened to come on a visit to Port Elizabeth a year later, and brought it with him. With a broad smile on his ingenuous face he remarked, "FitzSimons, I have got one up on you this time, anyway," and his companion agreed.

He was avariciously inclined, apparently, because

he further remarked, "Now, sir, before you examine the specimen, are you prepared to wager £10 that it is not a two-headed snake?" Twee-Kop Slang—he termed it.

He was mightily amused when I told him it would be sheer cold-blooded robbery, because I would win the wager for certain. His friend wanted to put up an additional £10, but I declined to take it up.

The pair of dorpites were obviously annoyed at my expression of utter disbelief in their assertions that the specimen was a genuine 100 per cent two-headed snake, and at my lack of courage in refusing to risk a £10 loss.

"Very well, then, I will, if you wager it had a head where the tail ought to be, as well as one in the place where Nature intended it to be, and so a double bet I will make it."

The pair laughed gleefully. The pickled specimen was duly inspected, and it turned out to be a Burrowing Snake (*Typhlops mucroso*), two feet six inches long. These snakes have blunt tails, blunter even than the nose; the jaws and vent slit are almost identical, and the eyes are small black dots, barely noticeable. There are several species of Burrowing Snakes, and it is excusable for a layman to conclude they have two heads.

But there are instances of real double-headed snakes. One occurred in America. It was kept alive in the reptile department of the National Zoological Park. It had one body and there were two heads with a length of two inches of neck to each, and when

stretched out the snake had the appearance of a forked stick. It was what we term a sport, or freak. The two gullets and windpipes were connected with a common stomach and lung respectively, so that the reptile could both breathe and feed. A photograph and short article on this remarkable freak of the reptilian world appeared in the *Journal of the American Museum of Natural History* (volume xxv, 1925). Having two heads, there were two separate individualities, although they possessed only a single body. When a frog was given to one head it was eagerly snapped up, but if the other head felt hungry too there was a fierce tussle for the prey, which often as not ended in a fight. But, fortunately, the reptile was a non-venomous species, so the two heads were unable to do any serious harm to their body. To stop this jealousy and fighting over the food, two frogs or two mice were given simultaneously. This, however, was not a complete success, because now and again one head succeeded in disposing of its morsel before the other; and if its appetite was still unappeased it tackled the rival head and attempted to deprive it of its meal; although both luncheons would have eventually gone into one stomach.

The occurrence of other two-headed snakes is also mentioned in the same article. We once had a freak snake of this sort, with three inches of neck to each head, and it behaved similarly. One day Johannes gave the two heads a frog apiece and left them to dispose of the food. The following morning he looked into the box to see if all was well, but to his amazement he noticed one head had swallowed the



SPITTING COBRA OR RINGHALS IN THE ACT OF CARRYING OFF ITS PREY,
WHICH IN THIS INSTANCE IS A SPOTTED OR RHOMBIC SCHAAPSTEKER



RINGHALS OR SOUTH AFRICAN SPITTING COBRA AND HER BROOD. WHEN BORN THE POISON GLANDS OF THE YOUNG SNAKES ARE FULLY CHARGED WITH DEADLY VENOM

other down to where the body divided. Being hastily summoned, I discovered the head that had been swallowed was not dead. After gentle massaging the tangle was straightened out, but the heads were subsequently not as friendly as formerly, and one day the end came. The brain which had temporarily become a meal, seemingly, never forgave the other. The indignity of being swallowed rankled. What the immediate provocation actually was I do not know, but it had evidently attacked the other head with full intent to kill, because both heads and body were found cold and dead. The snake was of the Back-fanged species, it being one of the *Schaapsteker* genus (*Psammophis*). The aggressive head had bitten the other repeatedly and injected sufficient venom to cause death ; and the other had retaliated. This we verified by a post-mortem.

According to popular belief, snakes are invested with phenomenal powers of leaping and travelling. "True as God's in heaven," declared a citrus farmer, "I saw a Puff Adder leap at me right over one of my orange trees, and it fell at my feet."

"What did you do ?" I inquisitively inquired.

"Do !" he shouted, "I ran like billio."

Another fellow, who owned a farm at Addo, staunchly asserted he was walking along the bed of a dry water-furrow when a Puff Adder leapt from the bank at him and missed his face by the proverbial inch. Never get behind a Puff Adder, is the well-meaning advice of friendly sons of the soil. "Why ?" you ask. "Because it can leap for a couple of yards backwards."

If snakes could spring over trees, and across furrows, and make long jumps on level ground, old Johannes, surrounded with a thousand odd of them, would have a precarious time.

Think, too, of our Snake Park, right in the centre of the chief residential part of the city, with its four-foot wall. That belief about the jumping propensities of snakes was nearly the cause of South Africa not having a Snake Park at all. It was like this.

When it began to be whispered round that I proposed building a huge open-air enclosure with a low wall in which to keep live snakes of all South African species, our neighbours became alarmed, especially those who owned children ; the local authorities were approached and asked to sternly prohibit such a wild, mad, and dangerous scheme. The agitated citizens were wisely referred to our Board of Trustees ; but the latter didn't believe in jumping snakes. So the Cape Provincial Administrator, and, later, the Central Government, were appealed to ; but the petitioners were once again referred to our Trustees. Lastly, some of them tried anonymous letters of a nasty nature to the local Press ; but the latter refused to aid in such underhand schemes ; then one, more pugnacious than the rest, declared he would punch my head. Now the citizens who were firmly convinced the snakes would leap the enclosing walls and escape are our most ardent supporters.

Terrestrial snakes cannot jump from the ground, but in the act of striking with intent to kill they often throw themselves forward the full length of their own

bodies. The arboreal snakes, such as Mamba, Boomslang, and Bird Snake, apparently leap from branch to branch ; but, in reality, they swing, jerk, grip and propel their bodies among the branches and twigs. Most certainly they can drop from a branch to a lower one and move off with celerity, hardly pausing to steady themselves. Snakes, with the exception of the Mamba, are comparatively slow in their movements, and an average person can out-distance them on foot.

Should one of these black devils elect to pursue a man in the bushveld, scrub, or rock and grass-covered country, he hasn't a hope of out-distancing it. But Mambas, with but few exceptions, flee to cover at the sight of man.

No snakes cross-breed, as many people suppose. Indeed, no creatures in the wild or feral state breed with others of a different species. It is only when man intervenes that this occurs with some species of mammalian animals and birds. When the average barefooted kraal native kills a snake, he usually carries it to the nearest wire or bush and hangs it thereon. Else, if a fire is handy, he burns it. This is because he believes the fangs and bones are capable of causing poisoning should they be trodden on and pierce a bare foot, even years after the death of the snake. This is not so. The venom of snakes rapidly decomposes and loses its poisonous properties after the death of the reptile, unless specially treated by an expert on snake venoms. But if the bone of a rotting snake should cause a wound it may possibly induce

septicaemia. The decomposing matter of the bodies of flesh-eating animals is more apt to set up blood-poisoning, if it should enter a wound in the skin, than that of non-flesh-eating creatures.

It is widely believed that snake venom, if swallowed, will convey immunity to snake-bite. This is untrue. When the venom is swallowed it is digested and rendered innocuous, unless the person is suffering from gastric ulcer or an inflamed stomach due to a night's indulgence in strong drink.

Snake venom must get direct into the blood unchanged to cause death or confer immunity.

We are frequently asked, "Where do snakes go in winter-time?" During the summer months snakes feed freely on rats, mice, lizards, birds, and other creatures according to their kind, and lay by an accumulation of fat. During the later autumn they instinctively seek some sheltered place in which to hibernate. Apart from a comparative scarcity of food during the winter months, snakes grow sluggish when the season begins to change from autumn into winter.

All so-called warm-blooded animals, which comprise birds, the lower mammals, and man, have a constant and fixed blood temperature. Not so with reptile life. In their case it is affected by the atmospheric temperatures like a thermometer. In South Africa snakes usually begin to hibernate during April and May, and emerge again hungry and emaciated in September and October. This varies somewhat in different localities.

A great many snakes perish during the winter because they have been unable in the preceding

summer to lay up sufficient fat to keep the fires of life alive during the long fast which they are compelled to endure.

Digestive activity stops during the hibernating season, with the exception of certain processes for the breaking down of fatty tissue and converting it into heat. Should a snake be forcibly fed in winter-time the food will not digest, and decomposes and kills the snake, unless it be active enough to disgorge it.

It ought not to be necessary to say that snakes do not sting with their tongues. The tongue is extremely sensitive, enabling the snake to feel its way in the dark and among dense vegetation. When alarmed the tongue darts out and in, flickering all the time, and the more frightened or angry the snake gets, the greater the activity of the forked tongue. The highly venomous snakes possess a pair of active fangs set in the front of the upper jaw. These are connected by channels or ducts with a pair of glands which distil and store the venom. When the snake drives its fangs into its victim's flesh, a set of powerful muscles squeeze and wring the glands, expressing the venom with great force through the ducts and hollow fangs into the wounds.

The Back-fanged division of snakes have a less developed poison-ejecting apparatus ; while the non-poisonous species have no vestiges of poison fangs, although they can, and do, bite and draw blood with their sharp solid teeth.

One day, when following a Kafir path through a forest in Natal, I met three native women, and each had a flat stone balanced on her head.

"Why are you carrying those stones?" I asked curiously.

The explanation was that Mambas were in the habit of lying hidden in the branches of trees which overhang these narrow paths, along which the natives follow one another in single file. In such openings birds are apt to disport themselves, rats and mice come out to play, and the Mamba is merely lying in wait with the hope of making a capture. Should a native pass under and disturb the branch, the irritated snake lunges downwards and bites the head, neck or shoulders. A slab of stone in such an event is a good protection, for, as likely as not, the reptile would lunge at it.

I was at a buck hunt in Natal, and we were making a short cut through a belt of forest. A naked Zulu, armed with assegais and a kerrie, preceded me by some ten yards, when I saw a Black Mamba strike down from a bush, a branch of which overhung the pathway. So close was I that I actually saw the jet-black lining of its gaping jaws, which bit hard and fast into the native's neck. But the Mamba does not hold on, for it knows the potency of its venom, a drop of which means death. With a loud horrified cry of "Imamba!" the man sped along the path, but he had only gone some fifty yards when he pitched forward on to his face. It took a few minutes to withdraw the cartridges loaded with loopers, and thrust in a couple charged with fine shot, to shoot the Mamba before arriving on the scene of the tragedy; but when the victim was turned over he was dead.

The Puff Adder is a dour and surly chap; you

can never be sure of living in continuous peace and harmony with him. Cobras, Boomslangs, Night Adders, and even Mambas become so tame that you may allow them to creep, climb and slither round your neck and inside your garments ; but so long as you don't treat them roughly, there isn't much danger of getting bitten. Despite this, I do not recommend amateurs to treat them too familiarly unless, perchance, they are weary of this mortal existence. However long you might keep a Puff Adder in captivity, he can never be trusted, because he is suspicious and bad-tempered by nature. He loathes humanfolk, and he hasn't any sense of gratitude for favours granted.

One fine day a big, fat Puff Adder in the Snake Park was dozing peacefully in the warm sunshine, when a Boomslang began to worry him. He hissed in protest, but the Boomslang persisted in crawling over and round him. Losing his short temper, the Puff Adder struck, and the Boomslang bit back. They then came to grips, and to get rid of his tormentor and make use of him at the same time, the former seized the Boomslang's head and began swallowing him, which was made easy because of the paralysing effect of the venom that had been copiously injected into him. The swallowing process went on calmly and steadily until only six inches of the tail of the Boomslang was visible to the onlookers. Suddenly the Puff Adder seemed to grow less eager. He turned over and over, squirmed, wriggled and lay still. Thus died the combatants, victims of their evil passions.

Sometimes one hears of snake-killing dogs which, apparently, live charmed lives, and the general

belief is that these animals are immune to snake venom. Occasionally a dog is especially skilful in killing snakes and escapes being bitten : or else it receives several non-fatal doses which, naturally, raise its resistance to the venom, and what would have been a fatal bite to another dog does not prove disastrous in its case. After recovery from each bite, the standard of resistance to venom rises, but sooner or later the dog receives a dose so large that, notwithstanding its partial immunity, it dies.

The late Mr. W. Grey Rattray, of Craig Hall, Johannesburg, had an Irish terrier bitch which accounted for 269 snakes—mostly Ringhals. This was the number actually recorded in the owner's diary. He told me the dog used to be almost continually on the hunt for snakes, and when she made a kill the victim was triumphantly brought home and laid upon the doorstep for inspection. The animal bred freely, but one day, during an encounter with a Ringhals Cobra, she got very severely bitten and nearly died. This caused sterility for several years. One day she came staggering home with a Ringhals Cobra and, lying down by the side of her victim, died. The snake had bitten her on the soft vulnerable skin of the abdomen, with fatal results.

Mr. J. E. Forest, a retired magistrate of Riversdale, Cape Province, relates another interesting instance of a snake-killing dog. He writes :

But for immunity to snake-bite of a perfectly marvellous type commend me to a dog, a pitiful mongrel belonging to a neighbour of mine in Slangfontein (Snake Fountain).

This cur had only to see a snake to go for it and kill it. Having been bitten over and over again, his normal appearance was that of a dog who had little interest in life. His long, shaggy black-and-white coat was filthy ; his bushy tail was ditto, and it dropped on the ground perpetually. He never, by any chance, lifted or wagged it. One day when I met him and his master, the dog's condition struck me as more doleful than ever, and with reason was it so.

"Ploughing the other day," said his master, "I nearly trod on a big Puff Adder and all but got bitten too. But the dog rushed up at it and got a rare bite close to his eye from the snake. This time I made up my mind I should lose him ; his head swelled up as big as mine, and he lay unable to eat or drink all that day and the next. Then I coaxed a drop of milk into his mouth and—you see, he is getting about nicely"

"And the Puff Adder ?" I asked. "Oh, I forgot to tell you that," said he. "The dog recovered from the bite ; the snake it was that died, for old Mopus here killed it after it had bitten him, and I reckon any snake that bites him after this is only wasting time !"

We have many other cases of snake-killing dogs recorded in our diaries, but, in all instances, these dogs eventually died of the bite.

A very interesting instance of a dog's life having been saved by the employment of artificial respiration and anti-venomous serum is recorded by Captain E. S. Donisthorpe, who was farming at Middledrift in the Transvaal. He wrote to me as follows :

It may interest you to know that my hunting dog

was cured of a bite by a Cobra in a most remarkable manner. The dog was bitten at 10 p.m. on the stomach by a large Cobra, and lay in a dying state through the night. The snake struck with both fangs. The dog was quite paralysed and the throat was closed, and thick saliva flowing from the mouth. By 6 a.m. breathing ceased and was restored by artificial respiration. I then injected some of your anti-venom serum into the dog's thighs. He became conscious in about an hour, after which he quickly recovered and came back to health. In fact, by 11.30 a.m. he got up and walked, and by evening he was eating rice and milk. For a few days the dog's breathing was hard at night, but this passed off, and he is as fit as ever. I must say I always had strong faith in this anti-venom serum, but I did not expect so quick and complete a success as I had with it. It should be noted no permanganate of potash was used, as the bite was, at first, not located, but showed up later by ulcers and inflammation at the fang punctures.

When bitten by a highly venomous snake one's first impulse is to apply some form of treatment with the least possible delay ; or else to rush off and seek assistance. The stoicism and coolness of one of our native snake-catchers is without parallel. He was paid a price for each live uninjured snake, and his favourite hunting-ground was the demarcated forest in the vicinity of Port Elizabeth. Encountering a Puff Adder, he pinned it down by the neck with a forked stick. While in the act of picking it up between his forefinger and thumb it jerked its head free and, with a swinging side stroke, drove both fangs home in the man's forearm. But, instead of running off to

seek attention, he calmly followed up the snake, caught it, and after carefully securing it in a billy-can, set off with his prize to the Museum for the dual purpose of collecting payment and for obtaining treatment. He did not appear to be perturbed in the least by the dangerous state to which his arm and shoulder had swollen. When admonished for not leaving the snake and coming sooner, he remarked that five shillings was a lot of money to lose, and he had a wife and family to support. The fact of the matter was he had a very exaggerated belief in the efficacy of anti-venomous serum. However, we injected him with a double dose and sent him to the local hospital to be kept under observation for a day or two ; but no further treatment was necessary.

An extraordinary adventure with a snake was reported to me. It occurred at a farm in the Pietersburg district of the Transvaal when a five-year-old child, named Guy Farmer, was attacked by a Black Mamba. The story of how the child was saved by his dog, which, unfortunately, was bitten to death in the subsequent struggle, amounts to an epic of animal heroism.

Mrs. Hetty Farmer, mother of the child, was a guest on the farm which lies in a somewhat isolated area, backed by a line of rocky kopjes. Snakes had been seen there at times, but then, these reptiles are encountered almost everywhere. Mrs. Farmer missed her son, who is described as a pretty, curly-headed child. Presumably, he was playing with his devoted dog somewhere behind the homestead. At length a frantic barking attracted her attention, and rushing

out to the back, a strange sight met her eyes. A Black Mamba, swaying from side to side, was approaching the dog, which was barking furiously at it. Looking over its shoulder at intervals towards the child, the dog seemed to be begging him to run away ; the boy, however, stood as if transfixed. The snake quickened its speed, and the dog jumped at it, the two engaging in a life-and-death struggle. Mrs. Farmer snatched up her boy with the intention of getting him away from the spot and returning with a gun from the house.

Within two minutes the dog's barking ceased. It staggered for a few paces and dropped, whereupon the snake made after the mother and child. Telling the boy to run to the house—which he at once proceeded to do—Mrs. Farmer heroically faced the oncoming "living death". She seized a large stone, threw it in desperation, and, by a most lucky chance, it dropped on the back of the Mamba, which stopped and wriggled convulsively, its back evidently having been broken. Mrs. Farmer then hurried the child to the house, returned with her gun and shot the still wriggling creature, after which she went across to the little terrier. It lay inert, although its heart appeared to be still beating, and she carried it back to the house, but it died half an hour later. Mrs. Farmer, who was greatly upset by the occurrence, stated that her son was inconsolable, and that she had ordered a tiny coffin and stone (inscribed) in the memory of the gallant little animal which gave its life for her child.

Sergeant Hughes Halls, in charge of the British South African Police camp at Hartley, in Rhodesia, was

searching for matches in his hut when he stepped on something in the dark, which gave out a noise resembling air escaping from a leather receptacle. He thought he had trodden on his leather collar-box. Not finding his matches, he retraced his steps towards the door, and on his way thought he would pick up the collar-box. He reached down to do so, and, to his horror, touched what he knew instantly to be a snake. He immediately made a dive for some shelves where his electric torch was, and, seizing it, turned the light on to the snake, which proved to be a Cobra. Afterwards it was found to be six feet six inches long. It was sitting up with hood expanded ready to strike, but was apparently blinded by the torchlight. It tried once, and even twice, to get out of the line of light, but the sergeant kept the light playing on it and, meantime, steadily backed towards the door. Opening it cautiously he jumped through, slammed it behind him and went to look for a weapon. Another trooper happened to be handy with a shotgun, and quickly disposed of the reptile.

Another case of an almost analogous nature was reported to me in detail by the victim herself. She is the wife of a well-known British settler in Southern Rhodesia. She occupied a bedroom with a baby son who slept in a cot in the corner of the room, while her husband occupied the adjoining room. The child began to whimper when feeding-time arrived—about two o'clock in the morning. Casting aside the bedclothes, the mother thrust a bare leg out, and her foot had hardly touched the floor when she heard the well-remembered hiss of a snake. At

the same time something seemed to stub her on the calf of the leg. Withdrawing her leg and crouching up in the bed, she called aloud to her husband to bring a stick and a light, warning him there was a snake in the room. When the husband appeared in the doorway, the light from a candle revealed a Cobra with hood expanded and ready for battle. It was promptly slain ; and a hasty examination of the woman's leg revealed two tiny purple spots which indicated where the snake's fangs had entered the flesh. It was only two weeks previously that the husband had procured what is commonly known as "FitzSimons' Complete Snake Bite Outfit", as a life insurance against snake-bite, as he termed it. By the time the syringe had been fitted up and the serum injected, the victim was in a state of complete collapse. All feeling had gone from her leg, general paralysis was rapidly setting in, difficulty in breathing and inability to speak were being experienced. Slowly she sank into insensibility ; but some twenty minutes or half an hour later—this is, after the serum had been injected—the lady opened her eyes and gradually regained consciousness. From then on she rapidly recovered, and, to use her own words, "I was able to get up about eleven o'clock in the morning and walk about, but it was a couple of days before the bitten leg got quite right."

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